UNIVERSIDADE D
COIMBRA

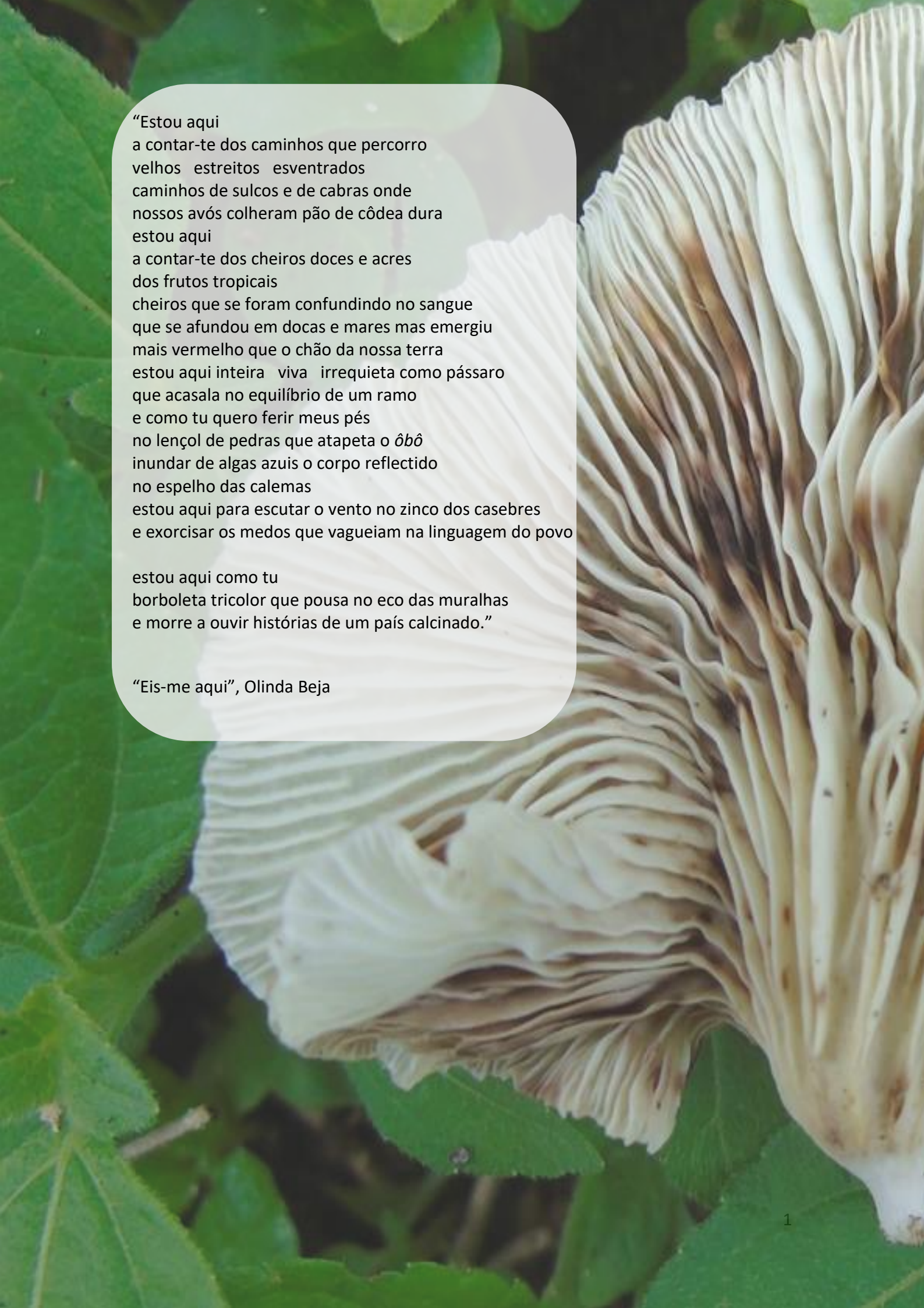
Ana Sofia Bernardes Simões

UTU D'OBÔ

MUSHROOM DIVERSITY FROM SÃO TOMÉ'S ISLAND

Dissertação no âmbito do Mestrado em Biodiversidade e Biotecnologia Vegetal orientada pela Professora Doutora Maria Teresa Gonçalves e pela Doutora Susana C. Gonçalves e apresentada ao Departamento de Ciências da Vida da Faculdade de Ciências e Tecnologia da Universidade de Coimbra

outubro de 2021



“Estou aqui
a contar-te dos caminhos que percorro
velhos estreitos esventrados
caminhos de sulcos e de cabras onde
nossos avós colheram pão de côdea dura
estou aqui
a contar-te dos cheiros doces e acres
dos frutos tropicais
cheiros que se foram confundindo no sangue
que se afundou em docas e mares mas emergiu
mais vermelho que o chão da nossa terra
estou aqui inteira viva irrequieta como pássaro
que acasala no equilíbrio de um ramo
e como tu quero ferir meus pés
no lençol de pedras que atapeta o *ôbô*
inundar de algas azuis o corpo reflectido
no espelho das calemas
estou aqui para escutar o vento no zinco dos casebres
e exorcisar os medos que vagueiam na linguagem do povo

estou aqui como tu
borboleta tricolor que pousa no eco das muralhas
e morre a ouvir histórias de um país calcinado.”

“Eis-me aqui”, Olinda Beja

Ackowledgements

The first person that I would like to thank is Maria do Céu Madureira. If she didn't have the audacity to dream so big, the *Tesouros d'Obô* project wouldn't exist and I wouldn't have this dissertation. Thank you, Maria do Céu for everything that you made possible and for everything that you taught me.

Susana and Teresa, thank you so much for believing in me and helping me through this tough job. And thank you for showing me that it is possible to love what you do and letting me learn with you every day.

Joanna, my dearest friend, my favourite person. Thank you for the unconditional support you've given me over the years. I'm very happy that you chose to cross the Atlantic Ocean to study. Coimbra wouldn't be the same without you.

Angelo, thank you for the endless nights of listening to bad Portuguese music and for letting me know I'm a pain in the ass. I'm very thankful for you, my friend.

Daniela, thank you for being my friend even though it was almost forced on you. You were the best work and travel buddy. I couldn't have asked for a better person to share São Tomé with.

To my parents, Cristina e Vital, thank you for the never-ending patience and support. I chose the most ridiculous and hard career path, and you allow me to keep chasing it. A thank you isn't enough.

Safú Ernesto, the literal love of my life. The cutest Santomean dog in history. Thank you for coming after me asking for food so I could find you. You're the best study and cuddle buddy in the world, I couldn't have written this dissertation without you.

Thank you to everyone that one way or the other were involved in the process, from the people I met in São Tomé e Príncipe (Caroço, Margarida, Nino, Alexandra, Osmar, Amarildo, Engenheiro, Cabral, João, Adilson, and so many others), housemates, friends, family, etc. I still appreciate you all very much. Thank you for being a part of my journey.

This dissertation was funded by the African Union under the Project AURG II-1-254-2016 – "Implementation of Agroforestry Systems in S. Tomé and Principe and development of non-wood forest products (NWFP) in Angola and S. Tomé and Principe to improve income-generation and food security" (Acronym: *Tesouros d'Obô*).

Resumo

São Tomé e Príncipe é arquipélago localizado no Golfo da Guiné, África Ocidental. A ilha de São Tomé é um hotspot de biodiversidade, apresentando elevadas taxas de endemismo. Estas taxas de endemismo são maioritariamente reportadas para plantas vasculares, aves, repteis, anfíbios e organismos marinhos. A diversidade fúngica da ilha de São Tomé tem vindo a ser estudada desde 1851, somando já cerca de 300 espécies de macrofungos reportados até 2019. No entanto, o conhecimento micológico é escasso e disperso, pelo que a necessidade de um estudo aprofundado é premente. O objetivo deste trabalho foi compilar todas as informações acerca da diversidade macrofúngica da ilha de São Tomé e adicionar novas informações obtidas em inventários micológicos *in situ*. Através de análise bibliográfica e missões de campo, foi possível construir uma lista de espécies de macrofungos e avaliar o seu potencial comestível e medicinal. Foi também possível avaliar a etnomicologia local, que se resume a quatro nomes comuns: *Utu*, *Utu-sandjá*, *Cloçon-son* e *Ntuda renda*. Tentou-se fazer a correspondência entre estes nomes comuns e os nomes científicos. O conhecimento dos cogumelos comestíveis e medicinais de São Tomé será uma ferramenta extremamente útil para o futuro das populações desta ilha, uma vez que o projeto *Tesouros d'Obô* pretende utilizar este conhecimento para estabelecer pequenas unidades de produção de cogumelos em comunidades-alvo.

Palavras-chave: São Tomé; Fungos; Cogumelos; África; Funga; Micologia; Cogumelos comestíveis; Cogumelos medicinais; África Ocidental; Diversidade fúngica

Abstract

São Tomé e Príncipe is an archipelago situated on the Gulf of Guinea, West Africa. São Tomé's island is a biodiversity hotspot, with reported high endemism rates. These endemism rates are mainly reported for vascular plants, birds, reptiles, amphibians, and marine organims. São Tomé's island's fungal diversity has been studied since 1851, summing up to around 300 macrofungi species reported until 2019. However, the mycological knowledge is scarce and dispersed, therefore the need for a deeper study is pressing. The objective of this work was to compile all of the information related to the macrofungal diversity of São Tomé's Island and add new information obtained in in situ mycological inventories. Through the bibliographic analysis and the field missions, it was possible to build a species list and evaluate the edibility and medicinal potential of those species. It was also possible to evaluate the local ethnomycology, that sums up to four common names: *Utu*, *Utu-sandjá*, *Cloçon-son* e *Ntuda renda*. It was attempted to establish the link between these common names and the respective scientific names. The knowledge of São Tomé's edible and medicinal mushrooms will be an extremely useful tool for the future of this island's populations because the Tesouros d'Obô project is aiming to use this knowledge to establish small mushroom production units in the target communities.

Keywords: São Tomé; Fungi; Mushrooms; Africa; Funga; Mycology; Edible mushrooms; Medicinal mushrooms; West Africa; Fungal diversity

Index

Table Index

Figure Index

Abbreviatures

STP – São Tomé e Príncipe

PNOST – Parque Natural d'Obô de São Tomé, Obô Natural Park of São Tomé

ITS – Internal Transcribed Spacer

IUCN - International Union for Conservation of Nature

COI - University of Coimbra's Herbarium

SFSU - San Francisco State University

BR – Meise Botanic Garden (National Botanic Garden of Belgium's herbarium)

NY - The New York Botanical Garden

MUCL - Université Catholique de Louvain

STPH - São Tomé e Príncipe's National Herbarium

NWFP - Non-wood forest products

CMFA - Community Managed Forest Areas

m – meters

v/v – concentration volume/volume

KOH – Potassium Hidroxide

HCl – Hydrochloric Acid

1. Introduction

1.1. São Tomé's Island

São Tomé's Island (Fig. 1) belongs to the archipelago of São Tomé e Príncipe (STP), formally known as Democratic Republic of São Tomé e Príncipe. This small insular country, crossed by the Equator, is located in the Gulf of Guinea, in central West Africa. The official language is Portuguese and the population is around 214.000 people (CIA, 2021). In the 15th century, Portuguese explorers Pêro Escobar and João de Santarém reported finding the island uninhabited.

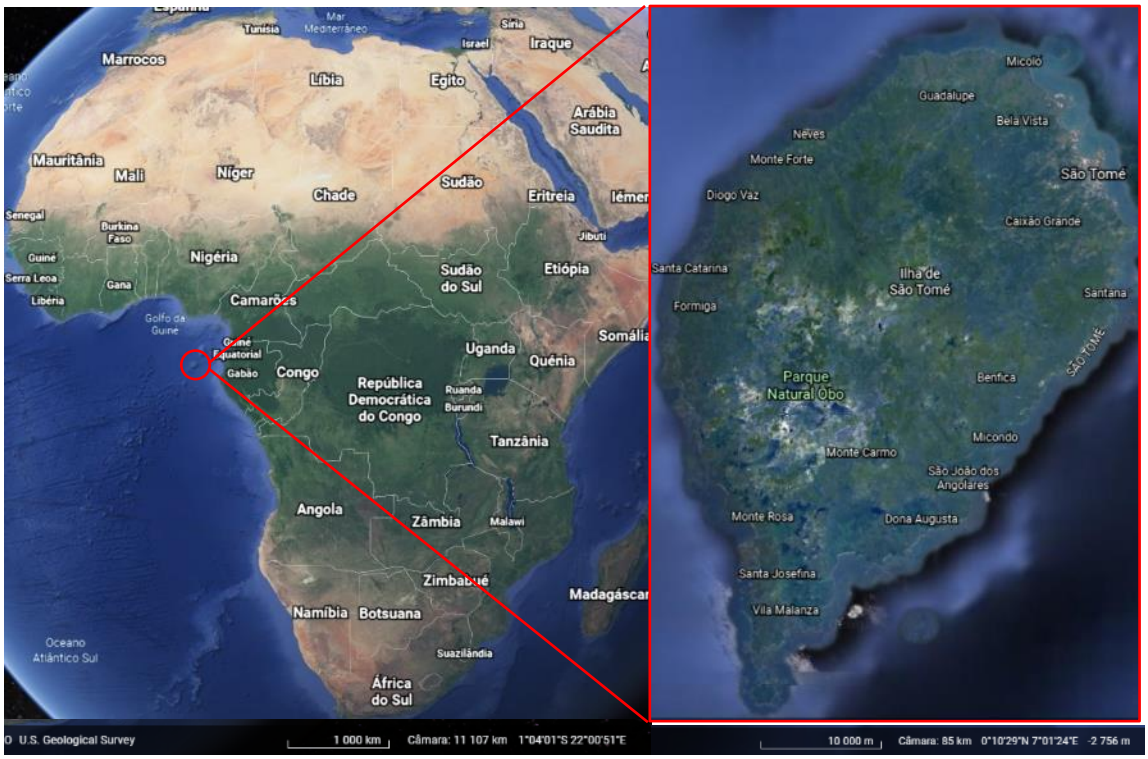


Figure 1 – Map of São Tomé's island with its location in the Gulf of Guinea highlighted with a red circle. Source: Google Earth.

Later, a sugar-based economy was established by way of slave work. In the 19th century, the sugarcane (*Saccharum* sp.) was replaced by coffee (*Coffea* sp.) and cocoa (*Theobroma cacao*), until the 20th century. STP obtained independence from Portugal in 1975, but it wasn't until 1991 that it had its first free elections (CIA, 2021). In 2020, it had an estimated population of

219.161.

São Tomé's Island is a volcanic mountainous island with 857 km^2, located in 00°25'N-00°01'S, 06°28'E-06°45'E, 150 km South-South-West from Príncipe's Island and 255 km West of mainland Gabon. Its highest point, Pico de São Tomé, is 2024 m above sea level.

The climate is tropical humid, with two main seasons: a rainier hot season with heavy rainfall for most of the year, and a relatively drier shortest season locally known as "gravana" (mid-June

to mid-September). The average annual rainfall is 2,000 to 3,000 mm/year and reaches 7,000 mm/year in the cloud forests (Fig. 2). The air relative humidity is very high, with more than 90% at higher elevations. The average annual temperature is around 26°C (Carvalho et al., 2014).

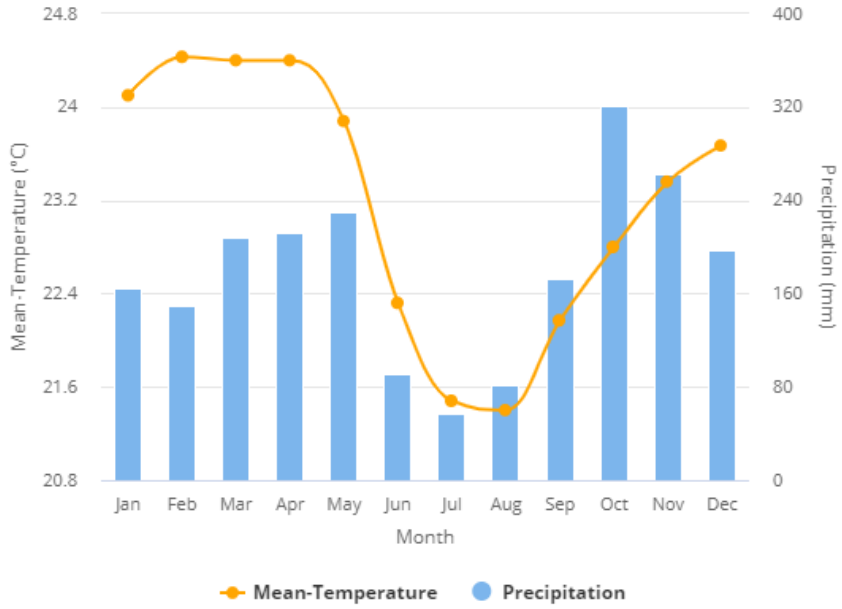


Figure 2 – Monthly climatology of mean-temperature and precipitation in São Tomé e Príncipe from 1991-2020. Source: https://climateknowledgeportal.worldbank.org/country/sao-tome-and-principe

1.1.1 Habitats

São Tomé's Island is comprised of three Forest Ecossystems (Fig. 3): Low Altitude Rainforest Zone (comprised by Secondary Forest, Shadow Forest, Savannah and Mangroves), Cloud/Fog Forest Zone, and Mountain Forest Zone (Carvalho *et al.*, 2014). These are made up of the following six plant formations.

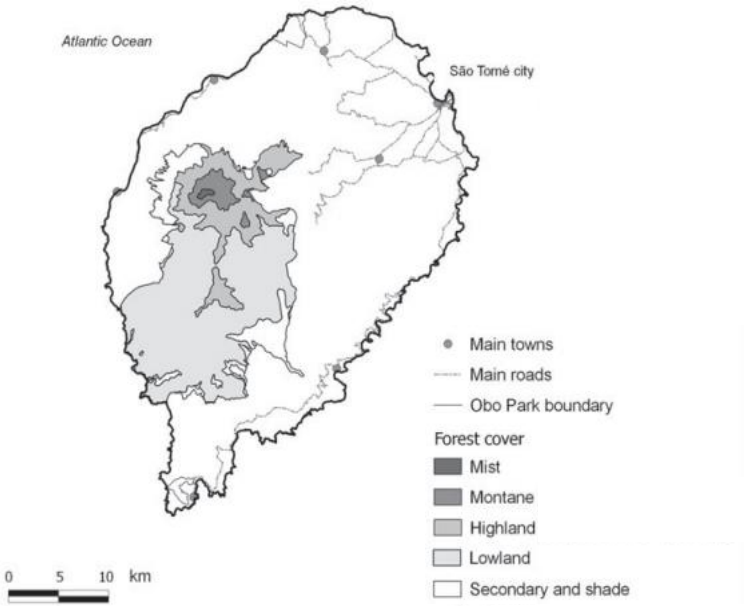


Figure 3 – Map of forest cover distribution in the Island of São Tomé. Adapted from: Carvalho *et al*., 2015.

Cloud Forest (Fig. 4), locally known as *Obô*[1], occurs from 1400 to 2024 m elevation, and has high rates of rain and relative humidity, with an ever-present fog accompanied by lower temperatures (when compared with other plant formations). It is characterized by small trees, epiphytes (mainly orchids), mosses, lichens and ferns. It is home to the only gymnosperm of the island, and endemic species*, Afrocarpus manii* (Pinheiro de S. Tomé, S. Tomé's Pine).

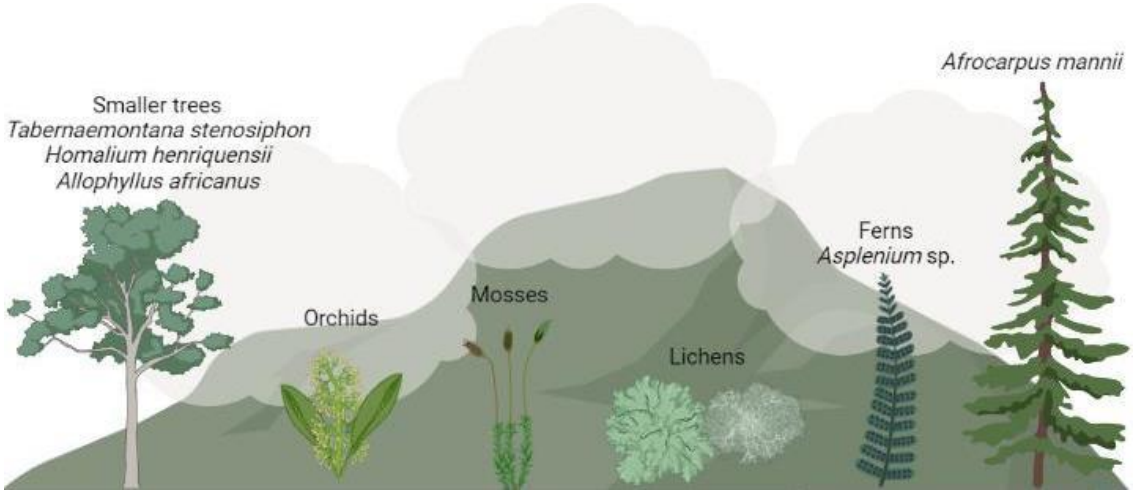


Figure 4 – Types of plants that occur in the Cloud Forest. The image is merely illustrative. Created using BioRender. Image not to scale.

[1] In Forro, the local creole, it means "Forest"

Mountain Forest (Fig. 5) occurs from 800 to 1400 m elevation and is characterized by tall trees (30 to 40 m) with dense canopies, epiphytes, lianas, ferns, tree ferns, that thrive in the high humidity. This type of plant formation is relatively well preserved.

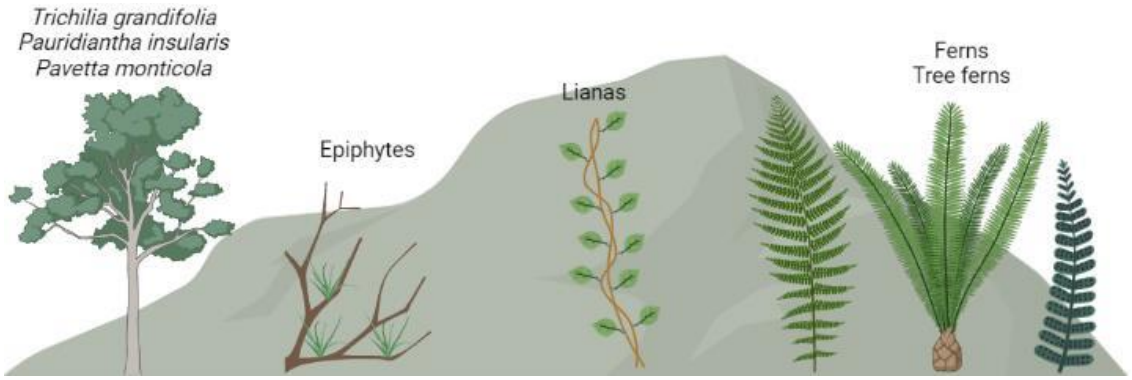


Figure 5 – Types of plants that occur in the Mountain Forest. The image is merely illustrative. Created using BioRender. Image not to scale.

Secondary Forest (Fig. 6), locally known as *Capoeira*, occurs in areas that were once cocoa plantations, established in the 19th century. It occurs in both highlands and lowlands. The abandonment of these areas gave way to ecological succession that developed secondary forests comprised of exotic, cultivated, pioneer species (like bamboo), tree species and fruit trees (like jackfruit).

Figure 6 – Types of plants that occur in the Secondary Forest. The image is merely illustrative. Created using BioRender. Image not to scale.

Shadow Forest (Fig. 7), namely for cocoa and coffee plantations, is comprised of spontaneous and introduced trees planted for the sole purpose of providing shade to the plantations.

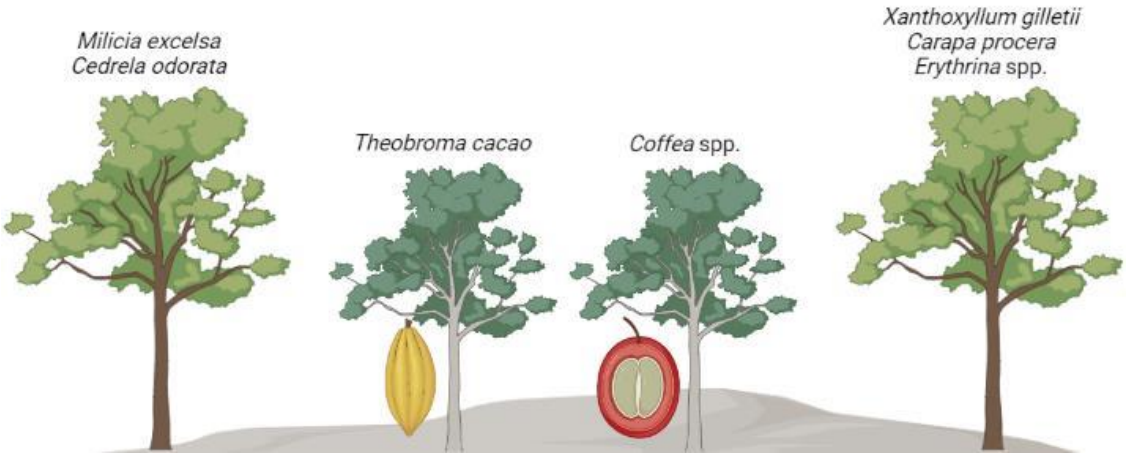


Figure 7 - Types of plants that occur in the Shadow Forest. The image is merely illustrative. Created using BioRender. Image not to scale.

Savannah (Fig. 8) is an edaphic and climatic formation near the coastline, that vary from semi-arid to arid climates (less than 700mm/year of rain). It is characterized by the predominance of herbaceous species, with some introduced trees (i.e., baobab and tamarind) and shrub species.

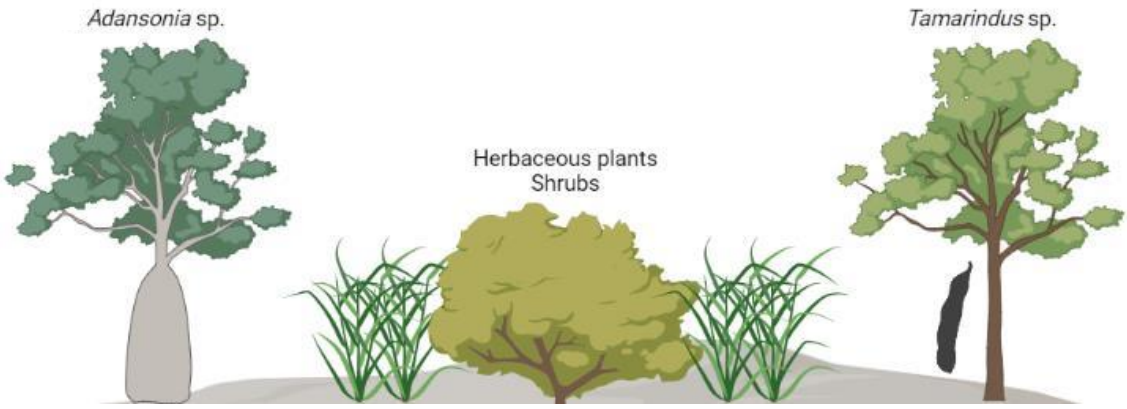


Figure 8 - Types of plants that occur in the Savannah. The image is merely illustrative. Created using BioRender. Image not to scale.

Mangrove (Fig. 9) occurs in the low coastal zone and in lagoons at the mouth of rivers. Because these are intertidal areas, the roots of mangroves are covered in algae, and house bivalves, crustaceans, and birds.

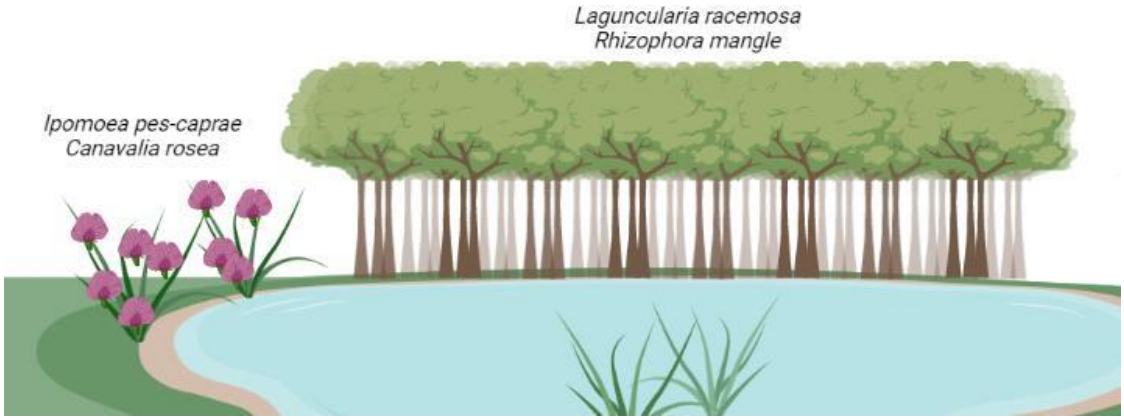


Figure 9 - Types of plants that occur in the Mangrove. The image is merely illustrative. Created using BioRender. Image not to scale.

1.1.1. Biodiversity

São Tomé island belongs to the Guinean Forests of West Africa biodiversity hotspot (CEPF, 2021). Due to being an oceanic island of volcanic origin, São Tomé has a lower species diversity but a high incidence of endemism. São Tomé presents 15% of endemism in plants , 100% in amphibians, and 80% in terrestrial molluscs (Jones, 1994). These high rates of endemism (Fig. 10) make São Tomé's Island a Biodiversity Hotspot.

PHYLOGENY GROUPS	ISLANDS	NO. OF SPECIES	ENDEMISM %
Mammalia (Except Bats)	São Tomé	10	30
	Príncipe	5	20
Mammalia (Only Bats)	São Tomé	9	55
	Príncipe	4	50
Birds	São Tomé	49	57
	Príncipe	35	54
Reptiles	Whole country	16	44
Amphibians	São Tomé	6	100
	Príncipe	3	100
Insects (Only Butterflies)	São Tomé	47	38
	Príncipe	42	21
Molluscs	São Tomé	39	77
	Príncipe	32	78
Higher plants	Whole country	895	15

Figure 10 – Species Richness and rates of endemism. Adapted from Carvalho et al., (2014)

Despite this, the biodiversity is still threatened by human activities and this fact led to conservation concerns that culminated in the creation of the Obô Natural Park of São Tomé (PNOST). The PNOST (Fig. 11) is a protected area mainly made up of Cloud Forest and Mountain Forest. Even though efforts have been made to establish the PNOST, the park lacks effective

management. The protected areas are still subjected to illegal hunting (for birds, monkeys and bats) (Carvalho *et al*., 2015), illegal logging (mainly medicinal plants used for their bark, like Pau-três, *Allophyllus africanus*) and charcoal trade (mostly in the savannah).

Figure 11 – Map of São Tomé's Island with the PNOST highlighted by the darker green area. Source: Google Maps

1.2. Fungi and Mushrooms

Fungi are complex eucaryotic and heterotrophic organisms, phylogenetically separate from other organisms, forming their own kingdom (Fig. 12). They spend most of their life cycles in the form of mycelium, invisible to the naked eye. When the environmental conditions are favourable, the mycelium of fungi with sexual reproduction produces knots from where carpophores (or fruit bodies) grow. When these fruit bodies are bigger than 1 mm (visible to the naked eye), they are called Mushrooms, therefore meaning that the fungi that formed them are called macrofungi.

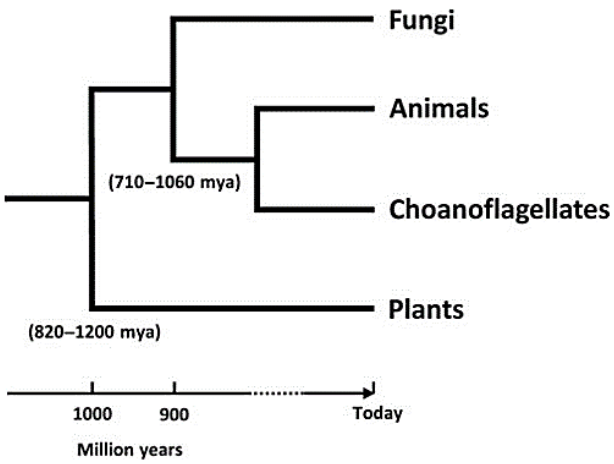


Figure 12 – Phylogenetic relationships between Fungi, Animals, Choanoflagellates and Plants. Fungi derived from Opisthokonts between 710 and 1060 million years ago. Adapted from: Watkinson *et al*., (2015)

Macrofungi have very important ecological and economic roles that are a result of their amazing diversity (Fig. 13). Mushrooms, the spore producing structures, are usually the only visible way to ascertain the presence of fungal species in a habitat, because the mycelium is frequentlyhidden in the substrate. They are responsible for spore production and dispersal. The morphology of mushrooms varies drastically, whether it be in shape, size, colour, smell, texture, spore colour and structural characteristics (like rings, sclerotium, volva, etc). Mushrooms can be edible (with various levels of edibility/quality), inedible or edible with precautions. They can also be medicinal, hallucinogenic, or psychoactive. They vary enormously in bioactive molecules, especially regarding toxins. When it comes to nutrition strategies, they can be mycorrhizal (ectomycorrhizas), saprophytic or parasitic (and sometimes both).

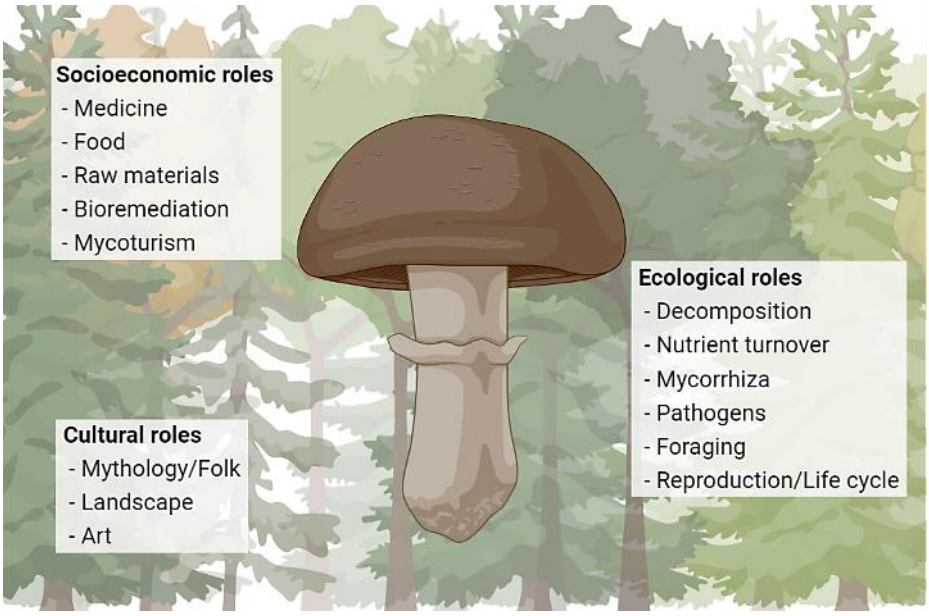


Figure 13 – Socioeconomic, Ecological and Cultural roles of Mushrooms. Created with BioRender

With the emergence of molecular phylogenetic analysis (mainly using the Internal Transcribed Spacers [ITS] regions) (Watkinson *et al*., 2015), the previous morphologically based classification of macrofungi suffered a lot of changes. Several genera were grouped under a single name and many species were classified under different genera, sometimes even different families. Macrofungi are found in two out of the six fungal phyla: Ascomycota and Basidiomycota.

Ascomycota

The phylum Ascomycota (Fig. 14) comprises various sized fungi (both micro and macrofungi) that have asexual phases, commonly known as anamorphs, and sexual phases, commonly known as teleomorphs. The anamorphs produce asexual spores, or conidia, on conidiophores. The teleomorphs are characterized by the formation of sexual structures (carpophores) called ascomata, that can be classified as apothecia (cup-shaped), perithecia (flask-shaped with an opening for spore dispersal) or cleistothecia (closed structures that open in various ways). The spore-producing cells called asci, are formed inside the ascomata. Inside the asci, the ascospores (sexual spores) are formed. Their hyphae have a single pored septum and lack clamp connections (Watkinson et al., 2015).

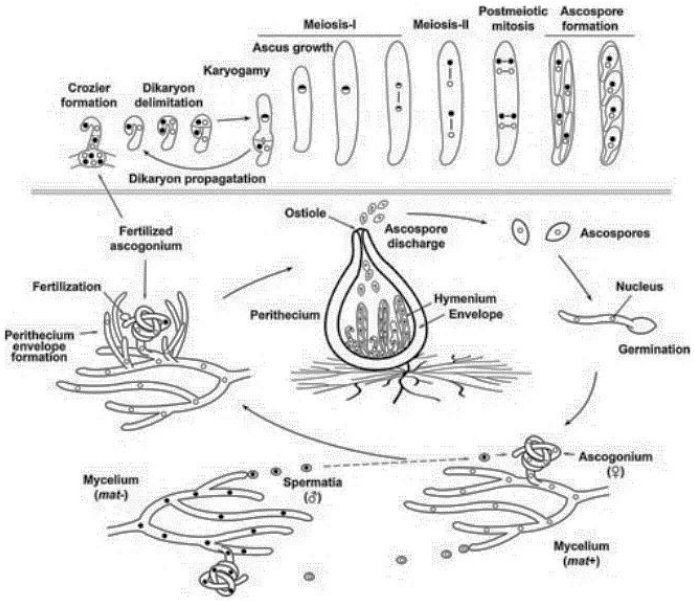


Figure 14 – Example of a life cycle from an Ascomycota fungus. Source: Watkinson *et al.*, (2015)

Basidiomycota

The phylum Basidiomycota (Fig. 15) comprises many different fungi, including mycorrhizal fungi, insect symbiotic fungi, plant, and human pathogens (mainly microfungi) and others that have important forestry roles. Basidiomycota fungi produce a tetrad of basidiospores on the outside of cells called basidia (except single-celled fungi), by nuclear fusion and meiosis. The hyphae have a dolipore septum and form clamp connections (Watkinson et al., 2015).

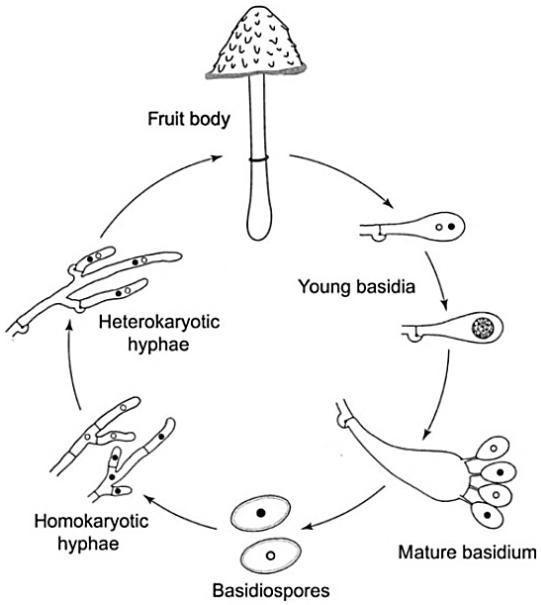


Figure 15 – Example of the life cycle of a Basidiomycota fungus. Source: Watkinson *et al*., (2015)

1.2.1. Fungal diversity

Fungi are usually referred to as an understudied group, mostly because they spend most of their life cycle out of sight. It is estimated that fungal diversity comprises between 2.2 million to 3.8 million species (Hawksworth *et al*., 2017). In 2019, 1886 new species were described for the first time (Antonelli *et al*., 2020) (Fig. 16). When compared to the approximately 148.000 accepted species nowadays, we are very far from understanding the full extent of fungal communities.

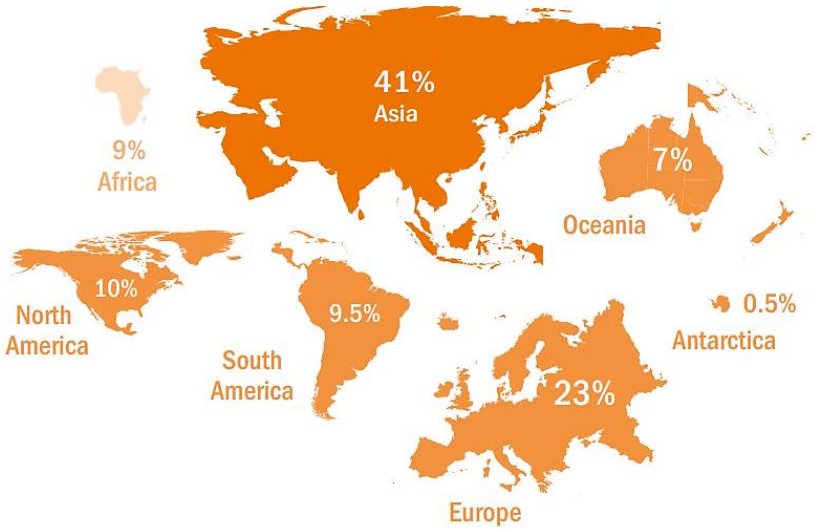


Figure 16 – The proportion of new species to science from each continent named in 2019, with percentages pertaining to fungal discoveries. The continents are presented with sizes proportional to their percentage of new species. Adapted from Antonelli et al. (2020).

The main challenge to finding new species, or confirming their conservation status, is their inconspicuous life cycles: many remain hidden in the form of mycelium for years, only developing visible spore-bearing structures when very specific conditions are met. This means that the most known species are actually mushroom-producing species (Antonelli et al., 2020), because that makes them "easier" to find than those that don't produce visible reproductive structures. Nowadays, we can circumvent this limitation using DNA sequencing, which allows the detection of a species in the absence of a preserved fruiting body, for example using samples of soil.

To ascertain conservation status and halt species extinction we need to define what we known, what we do not known and possible biases. For this, the International Union for Conservation of Nature (IUCN) created the Red List of Threatened Species to assess extinction risks for Plants, Animals, and, recently, Fungi. The Global Fungal Red List Initiative has published extinction risk assessments for *ca*. 0.3% (or 425 out of 148.000) of fungal species described so far (The Global Fungal Red List Initiative, 2020). Many efforts are being put forth to update the Fungal Red List (Fig. 17), with 719 species being proposed for assessment and efforts underway to explicitly include the Fungi in the post 2020 United Nations biodiversity framework (Gonçalves *et al.*, 2021).

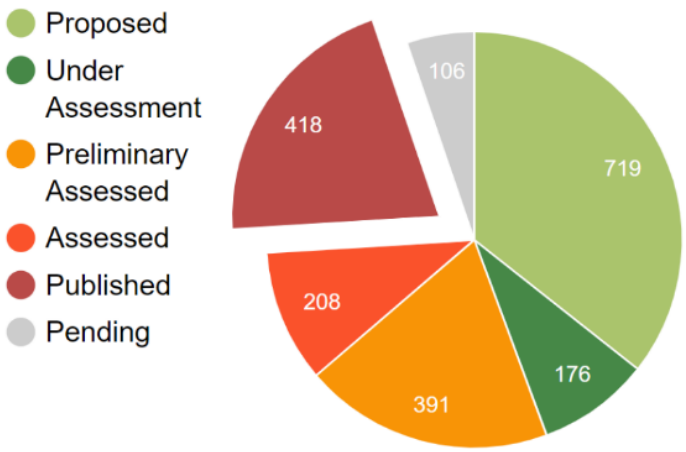


Figure 17 – Number of fungal species per category of assessment in the Fungal Red List. Adapted from The Global Fungal Red List Initiative, http://iucn.ekoo.se (2020).

1.3. Mushroom diversity in São Tomé's Island

Mycological knowledge is lacking everywhere. Some countries overexploit a specific species because that is all they have known. In other countries, mycological resources are wasted because no one knows their practical application. STP is no exception, neither the population nor the government known the number of resources they are neglecting just due to lack of knowledge.

On the 2007 report on the state of Biodiversity in STP (Vaz *et al*., 2007), it is said "(…) *Em relação aos Cogumelos, a Micologia santomense, tem muito para se conhecer. Contudo parecem existir sobretudo nas zonas húmidas e sombrosas das ilhas espécies pertecentes ao género* Lentinus*; o género* Termitomyces *que abarca cogumelos brancos, muito numerosos. E por fim o género* Cantharellus*, com espécies coloradas. Estes géneros pertencem provavelmente ao grupo*

Basidiomicetes. …"[2] . Most of this phrase is not corroborated by the literature, seeing as there are no references to the *Termitomyces* genus, and *Cantherellus* is rarely ever mentioned (moreover, most references to this genus have been updated to belong to other genera). All in all, Santomean Mycology has a long way to go, but has also come a long way, discussed further in this introduction.

From what could be gather among the population of the target communities of the *Tesouros d'Obô* project, there are three mushrooms with ethnomycological uses: *Cloçon-son*[3], *Utu*[4] and *Utu-sandjá*[5]. From the literature, it was found a fourth vernacular name: *Ntuda renda*. These will be further discussed in the Results.

1.3.1. Historical information[6][7]

The first mention of Santomean fungi was in 1855, when Elias Fries published 6 species (nonnew to science) that he identified from material collected in São Tomé's Island, along with other tropical locations (Fries, 1855). Following this publication, Heinrich Georg Winter published 34 species (Winter, 1886) identified from Adolph Möller and F. Quintas collections in 1885. Pier Andrea Saccardo and Augusto Napoleone Berlese supplemented (Saccardo *et al*., 1889) the previous information with mushrooms that A. Möller wasn't able to send to Winter from his 1885 exploration and other mushrooms collected by Francisco Newton in 1887. In 1890, Giacomo Bresadola and Casimir Roumeguère reviewed Winter's work and compiled it with Saccardo and Berlese's work, in hopes of creating an updated view of Santomean mushrooms (Bresadola *et al*., 1890). Giacomo Bresadola writes in his 1891 article in the journal Revue Mycologique (Bresadola, 1891) that he reviewed the collection started by Möller in 1887 and not only identified 26 fungal species (both micro and Macrofungi) but also added the substrate information to those already identified by Winter. António Xavier Pereira Coutinho identified the mushrooms collected by Manuel de Sousa da Câmara and Martinho de França Pereira Coutinho (his own son) in 1920, publishing 76 species (Coutinho, 1921). In this work, Coutinho made a summary of what was known about São Tomé's mushrooms up to this point mentioning that 106 species were already reported and that his work contributed with an additional 35. He also mentions that the number of new reports that his work allowed was an indication of how little was known about mushroom diversity in the Island. The book "Catalogue of the vascular plants of S. Tomé" by Arthur Wallis Exell was published in 1944. In it the author mentions 15 mushroom species from both São Tomé's Island and Principe's Island. It also includes a mention to *Phallus tenuis*' vernacular name: *ntuda renda*. After Exell's publication (Exell, 1944), nothing related to Santomean mushrooms was published for the next 65 years. It is also interesting to mention that most of the herborized vouchers were deposited in Heinrich Georg Winter's

[2] "(…) In relation to Mushrooms, Santomean Mycology has much to be known. However there seems to exist mostly in humid and shady areas of the islands species belonging to the genus *Lentinus*; the genus *Termitomyces* that includes white mushrooms, very numerous. And to finalise the genus *Cantharellus*, with colourful species. These genera probably belong to the Basidiomicetes group…" – free translation

[3] In Forro, it means "Floor's Heart" or "Earth's Heart"

[4] In Forro, it means "Mushroom"

[5] In Forro, it means "Sardine-Mushroom"

[6] Only mushroom species were considered, other fungal species were purposefully left out.

[7] Mushrooms reported for other Islands belonging to the São Tomé e Príncipe archipelago were puposefully left out.

personal herbarium and University of Coimbra's Herbarium (COI). Some of these articles included illustrations (Fig. 18) of the species that were being described for the first time.

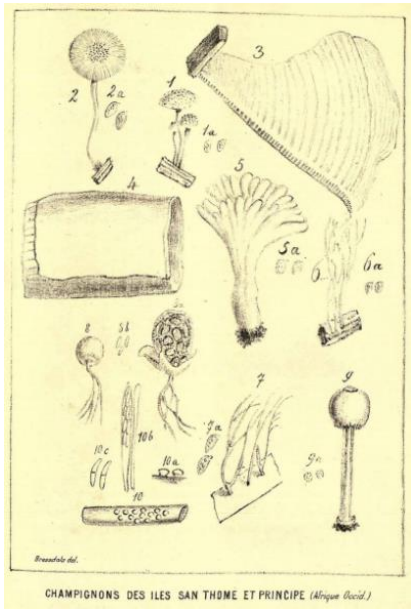


Figure 18 – Illustrations of mushrooms from STP. 1 – *Pholiota aculeata*; 1a - *Pholiota aculeata* spores; 2 - *Naucoria fusco-olivacea*; 2a – *Naucoria fusco-olivacea* spores; 3 – *Daedalea newtonii* in half; 4 – *Corticium quintasianum*; 5 – *Clavaria henriquesii*; 5a - *Clavaria henriquesii* spores; 6 – *Lachnocladium mollerianum*; 6a - *Lachnocladium mollerianum* spores; 7 – *Pterula subaquatica*; 7a - *Pterula subaquatica* spores; 8 – *Clathrus parvulus* egg; 8a - *Clathrus parvulus* mature; 8b - *Clathrus parvulus* spores; 9 – *Tylostoma mollerianum*; 9a - *Tylostoma mollerianum* spores; 10 – *Helotium herbarum*; 10a - *Helotium herbarum* mature; 10b - *Helotium herbarum* asci; 10c - *Helotium herbarum* spores. Source: M. G. Bresadola et al., 1889

1.3.2. Contemporaneous information[8]

The California Academy of Sciences, under the direction of Robert C. Drewes, developed biotic surveys in the São Tomé's Island for several groups of organisms. Dennis Desjardin and Brian Perry were responsible for collecting and identifying mushrooms. This resulted in 7 publications, with other authors, from 2009 to 2019 (Desjardin *et al*., 2009; Desjardin *et al*., 2015; Desjardin *et al*., 2015b; Desjardin *et al*., 2016; Desjardin *et al*., 2017; Desjardin *et al*., 2017; *Desjardin et al*., 2018; Grace *et al*., 2019), where several new species for science were reported. The species *Phallus drewesii* (Desjardin *et al*., 2009) was one of them, being named after Drewes, in honour of his initiative to explore the biodiversity of São Tomé e Príncipe (Watkinson *et al*., 2015). Cony Decock went on a collecting trip in 2011 and reported two new species for science: *Truncospora oboensis* (Decock, 2011) and *Coltricia oboensis* (Decock, 2013). Later, with Jérôme Degreef , Mario Amalfi , and Vincent Demoulin, two species were reported for the first time for the Island (Degreef *et al*., 2013): *Mutinus zenkeri* and *Blumenavia angolensis*. These three explorations (2004, 2006 and 2011) were the last known mushroom collections in the Island until 2019. These explorations resulted in herbarium vouchers deposited in San Francisco State University (SFSU)

[8] Mushrooms reported for other Islands belonging to the São Tomé e Príncipe archipelago were purposefully left out.

(all works by Desjardin and Perry), National Botanic Garden of Belgium's herbarium (now known as Meise Botanic Garden, BR) (Degreef *et al*., 2013), and The New York Botanical Garden (NY) and Université Catholique de Louvain (MUCL) (Decock, 2011 and 2013). Nothing was deposited in São Tomé e Príncipe's National Herbarium (STPH), that was created in 1994, therefore in existence at the time of the explorations.

1.4. Contextualization and Objectives

This dissertation is the result of a research fellowship that happened in the scope of the project AURG II-1-254-2016 – "Implementation of Agroforestry Systems in S. Tomé and Principe and development of non-wood forest products (NWFP) in Angola and S. Tomé and Principe to improve income-generation and food security" (Acronym: *Tesouros d'Obô*) and its focus was the Edible and Medicinal Mushrooms of São Tomé's Island. The project aimed to improve food security and income generation for small agro-entrepreneurs through the establishment Agroforestry Systems for the development of NWFP, including mushrooms.

The work developed in this Research Fellowship, and therefore this dissertation, pertained to:

- Inventorying the autochthonous mushrooms from the STP forests.

- Describing the collected samples and create mycological files for each sample.

- Identify the collected samples.

- Evaluating the edible and medicinal potential of the identified mushrooms.

- Identifying and evaluating the species with cultivation potential.

- Preparing herbarium vouchers to keep a physical log of the sampled species.

2. Materials and Methods

2.1. Literature synthesis

In order to compile all the available published information about mushrooms in São Tomé's Island, a bibliographic search was carried out and the information on recorded species, habitats and sample sites was gathered (Annex I). Only the species with sampling sites in the São Tomé's Island were considered. This resulted in an extensive table discussed further in the Results section. Some papers pertaining to the funga of West Africa and Tropical Africa were also analysed because as there's congruencies in flora there could also be congruencies in funga (Piepenbring *et al*., 2020). This analysis was used mainly when we had doubts about identification in the literature. The method used for this literature review is described in Figure 19.

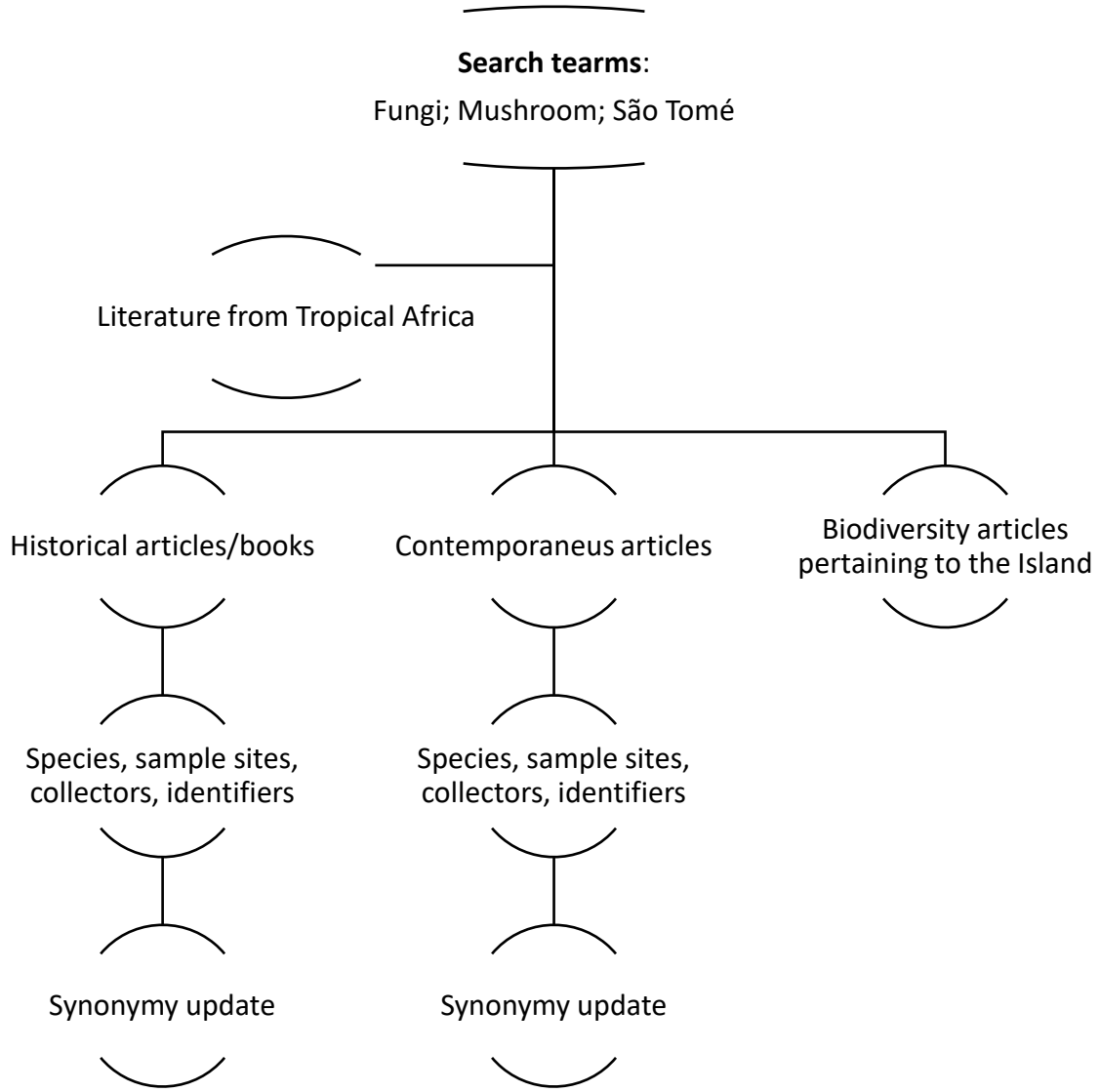


Figure 19 – Method used for the Literature Review

The edibility and medicinal potentials of recorded species for São Tomé's Island was evaluated to establish a base for decision making on the value and human uses of those mushrooms. This was done by searching for articles and book were the edibility and medicinal potential of the species was thoroughly investigated and confirmed.

2.2. Mushroom sampling

2.2.1. Study sites

The sampling sites (Fig. 20) were chosen according to convenience for the work developed for the *Tesouros d'Obô* project. The Community Managed Forest Areas (CMFA) from the communities of Abade, Plancas I and Saudade were the focus of sampling efforts. Other areas inside the PNOST (Chamiço, Bom Sucesso Botanical Garden, Caminho Fugido, Caminho da Antena/Macambrará, and Monte Carmo) were also sampled to evaluate more conserved forest

areas. The dates and collection numbers were compiled in the Table 1. The visits to the sampling sites we always done with members of the communities or member of the Direção de Florestas and PNOST. This is especially important to understand the population's knowledge on funga and to collect information on ethnomycology.

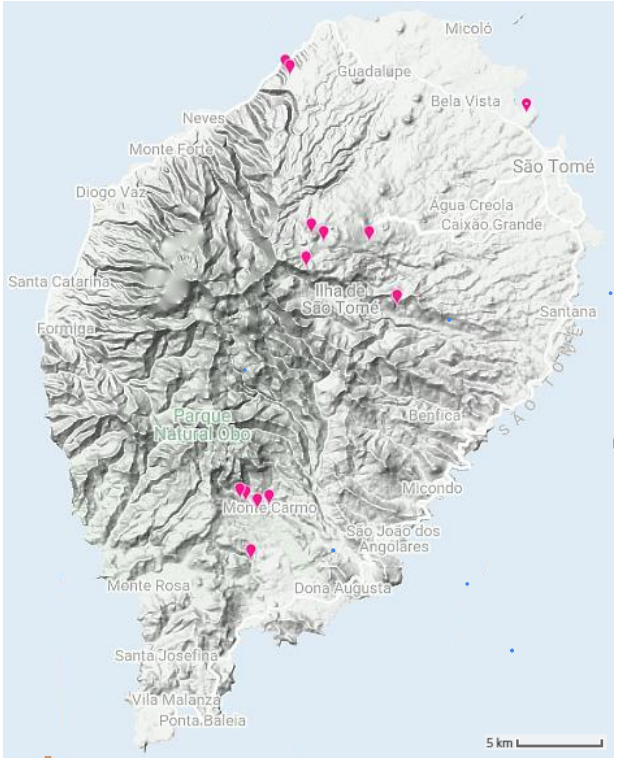


Figure 20 – Distribution of sample sites (pink) in the São Tomé's Island. Map generated by iNaturalist.

Table 1 – Number of samples per site for each field work date. 172 samples in total.

Date	Location	Number of Samples
16/07/2019	Plancas I	3
06/08/2019	Saudade	34
23/08/2019	Saudade	1
30/08/2019	Saudade	10
03/09/2019	Saudade	1
10/09/2019	Saudade	2
12/09/2019	Saudade	1
14/10/2019	Caminho Fugido	17
16/10/2019	Jardim Botânico do Bom Sucesso	11
17/10/2019	Plancas I	15
21/10/2019	Macambrará – Caminho da Antena	18
22/10/2019	Caminho Fugido	23

29/10/2019	Chamiço	1
06/11/2019	Abade	7
25/11/2019	Monte Carmo	21
10/12/2019	Plancas I	4
11/12/2019	Base Pico Cão Grande	3

The CMFA sampled were all located around the central and northern parts of the Island, where the climate varies from very humid (cloud forest) to extremely dry (savanna). **Abade** (Fig. 21) is located in the Mé-Zochi district, in a mountainous area in the central part of the Island. It is characterized by cloud forest, secondary forest from natural regeneration, and cocoa (*Theobroma cacao*) plantations. The 350 inhabitants of this community subsist mainly from cocoa plantations and logging.

Figure 21 – Community of Abade. Main house of the old cacao farm, now inhabited by local families.

Saudade (Fig. 22) is located in the district of Mé-Zochi, at 800m of elevation. This area is characterized by secondary cloud forest that has been exploited for cinnamon (*Cinnamomum* sp.), coffee (*Coffea* sp.) and agricultural plantations. It is highly humid with frequent raining, having an ever-present dense fog. The 170 habitants survive with logging, charcoal trade, and horticulture.

Figure 22 – Community of Saudade. “Segundo rio”, one the bodies of water that go through the CMFA of the community

Plancas I (Fig. 23) is located in the district of Lobata, in the North part of the island. This is a savannah habitat, the result of overexploitation of the soil for sugarcane plantations, soon abandoned, and characterized by its baobab trees (*Adansonia* sp., non-native), *Ocá* (*Ceiba pentandra*) and oil palm trees (*Elais* sp.). The ca. 180 habitants in this community take their revenue from logging, charcoal trade, and horticulture. The area is prone to long periods of droughtand fires, which usually result from burning for charcoal production.

Figure 23 – Community of Plancas I. Abandoned hospital

Table 2 associates forest type and elevation with each sample site. The sampling was done between 300 m and 1300 m. This means that mushrooms could be found in both high and low altitude forests.

Table 2 – Forest type and elevation of the sample sites. In bold, the CFMA, most pertinent to the project.

Sample site	**Forest type**	**Elevation**
Abade	Secondary forest	350 m
Bom Sucesso Botanical Garden	Botanical Garden with autochthonous species	1200 m
Caminho da Antena/Macambrará	Primary forest Preserved Cloud Forest (Obô)	1300 m
Caminho Fugido	Primary/Secondary Forest Heterogenous area with some preserved Cloud Forest (Obô), Secondary Forest and agriculture	1200 m
Chamiço	Secondary forest	850 m
Monte Carmo	Secondary forest	300 m
Plancas I	Savannah	305 m
Saudade	Secondary forest	820 m

Sampling took place between 16th July 2019 and 11th December 2019. covering both the drier season (gravana, from July to mid-September) and the rainy season from October to December.

2.2.2. Sampling method

The sampling was done opportunistically (convenience sampling) (O'Dell *et al* 2004) to maximize the opportunities for sampling. It was carried out from 16/07/2019 to 11/12/2019. Most field trips were done in the context of the project with multidisciplinary purposes; therefore a "non-structured" approach was chosen. Convenience sampling (Fig. 24) means that the sample site is roamed (always staying near known paths for safety) and all visible mushrooms are collected. This random sampling method was also used by previous researchers in the island for similar purposes (e.g. Desjardin & Perry in 2004 and 2006).

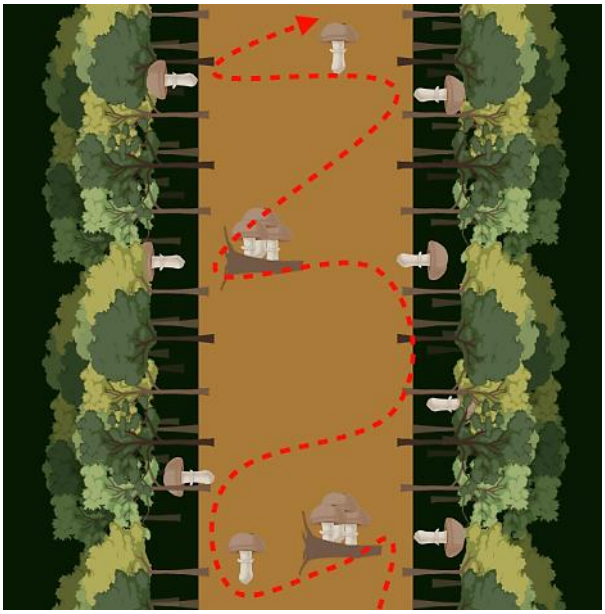


Figure 24 – Convenience sampling. In red, the route that the sampler takes in a trail to collect mushrooms and to ensure maximum sampling opportunities. Created with BioRender. Image not to scale.

2.2.3. Collecting fruit bodies

The fruit bodies were carefully collected by hand, usually with the help of a knife (only to lift or cut the substrate, never cut the mushroom), and cleaned of substrate remnants and insects with a brush. It was taken in consideration that all structures of the mushroom (above and below ground) should be collected and that the soil should be kept as undisturbed as possible (to minimise the impact of the sampling). It is also important to note that only mushrooms in good conditions were collected (leaving the old ones in place for spore dispersal). It was important to find a balance between collecting enough specimens to constitute duplicates of each sample and leaving a sufficient number of mushrooms behind, meaning that when there was more than one visually similar mushroom in a certain area, only one from each developmental stage was collected. The general location, GPS coordinates, habitat and substrate description, collectors' names, surrounding vegetation, and ephemeral (like smell) and/or distinctive (like the presence of a fragile ring) characteristics were registered on a field notebook (in pencil to make sure none of the information was lost when it rained) for each sample and associated with a collection number. The collection number obeyed a serial notation starting with the sample number, followed by the year and lastly be the collector's initials (i.e. 1.2019.ASS). This serial notation was never interrupted or restarted, meaning that it was continued even when the sample site changed. The last information collected was a photographic record of the mushrooms in their substrate, close-ups of the mushrooms and/or distinctive characteristics and the surrounding area (Fig. 25).

Figure 25 – Example of a photographic record, in this case, a close-up photo. Photo credit: Susana C. Gonçalves.

Then the mushrooms were tagged with a collection number (written on a stringed label attached to the sample) and deposited in wax paper bags or egg cartons for transport. These were then put in burlap bags and plastic bags. The later were less used as they accelerated the decaying process of the samples. This process (Fig. 26) was applied to every sample.

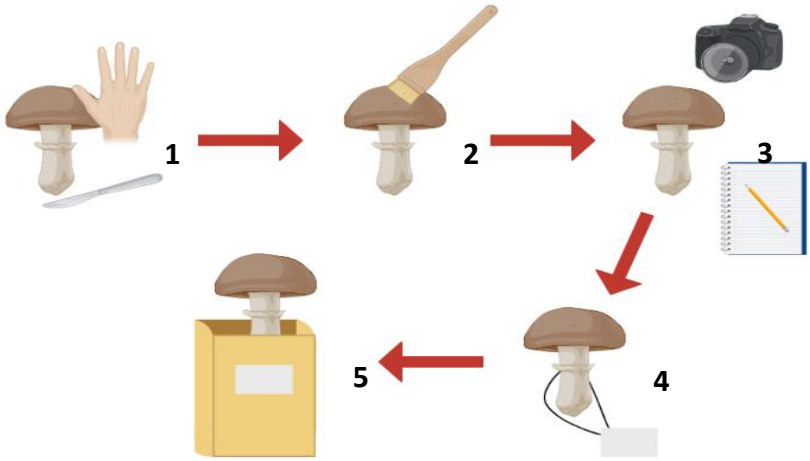


Figure 26 – Sampling process. 1 – Collection by hand with the help of a knife; 2 – Cleaning with a brush; 3 – Photographing and note taking; 4 – Tagging; 5 – Transporting in a wax bag. Created with BioRender. Image not to scale

2.3. Species identification

2.3.1. Macromorphological analysis

Each sample's macromorphology was observed and described in detail to obtain a record of the characteristics that can be lost in the preservation process. The descriptions were standardized for each type of fruit body for easier understanding (Fig. 27). All characteristics, including aroma, size, texture, presence of volva, ring, etc., were described (Fig. 28). For colour description, HSV Colour Plates for Mycology were used (Fig. 29). The information regarding macromorphology was collected according to a template made specifically for this work. The template was created in an attempt to have a standardized description for the specimens, based on previous works.

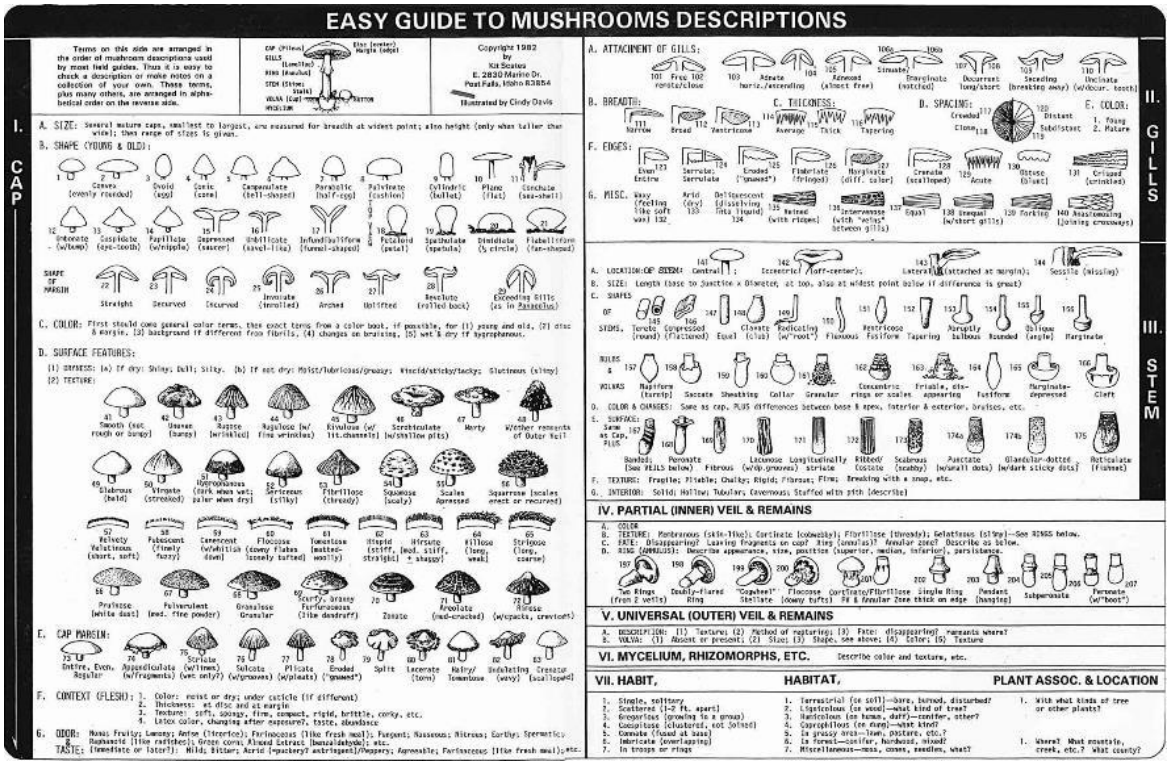


Figure 27 – Illustrated guide for describing mushrooms. Source: https://files.shroomery.org/files/13-16/623983192-Mushroom_Descriptions_ID_copy.jpg

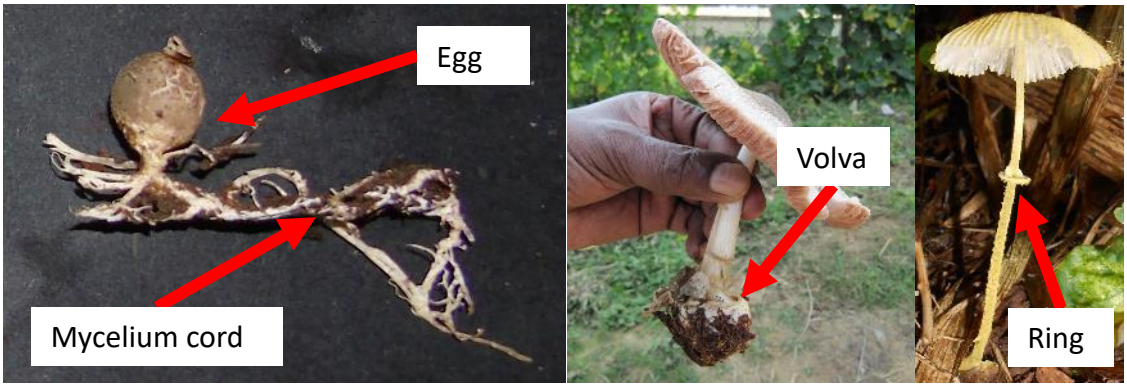


Figure 28 – Examples of macromorphological characteristics. 1 – *Phallus drewesii* egg and mycelium; 2 – *Volvariella* sp. volva; 3 – *Leucocoprinus fragilissimus* ring.

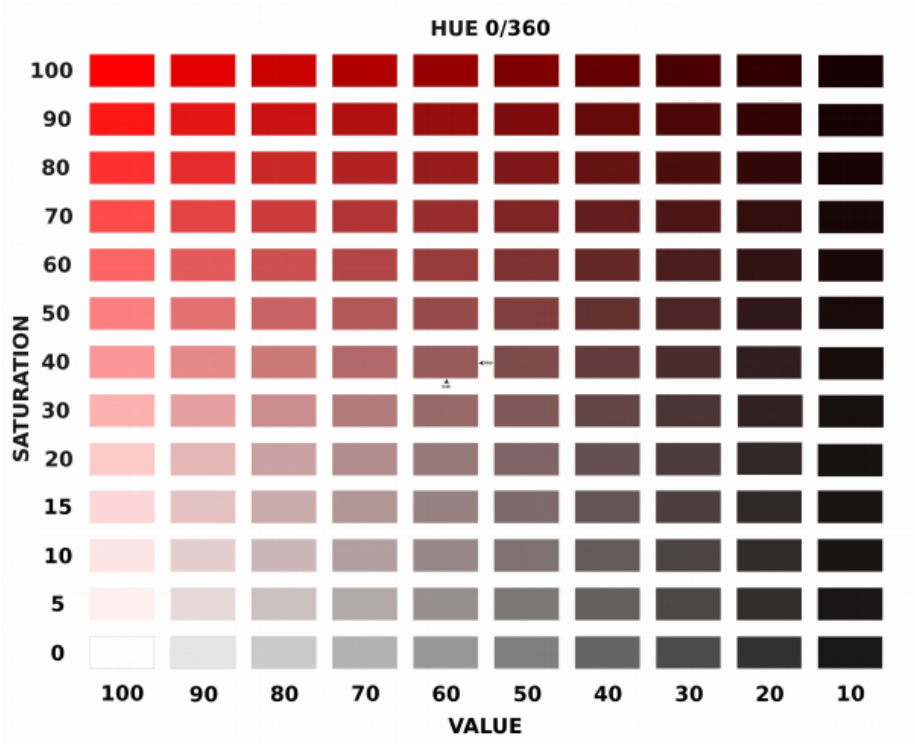


Figure 29 - HSV Colour Plates for Mycology. Source: http://website.nbm-mnb.ca/mycologywebpages/EssaysOnFungi/Collecting_mushrooms_for_scientific_study/Illustrations/HSV_plates_for_mycology.pdf

In this phase, it was possible to propose initial identifications (genera and species) that would later be confirmed with a micromorphological analysis. This evaluation was often done with the field photos in sight because the transportation process was very long sometimes, and many samples were damaged in the process or had to be evaluated 1 to 2 days after they were collected due to time restrictions or lack of electricity (that meant the work could only be done until sundown). When the later happened, the mushrooms were kept in a refrigerator until they were evaluated. During the process of macromorphological description, lab photos were taken for further register and to be used in cases where it was necessary to review the descriptions to reach an identification. The mushrooms were aligned in black paper with a ruler for scale and photographed as a group and close-ups (Fig. 30).

Figure 30 – Example of a close-up lab photo.

2.3.2. Micromorphological analysis

The micromorphological characteristics were assessed as follows. For each dried sample, a portion of the hymenium was cleaned in ethanol 96% v/v and rehydrated in distilled water for at least 2 minutes. Then, thinly sliced with a shaving blade or scalpel and mounted on 2% v/v KOH and Parker's Ink + 10% v/v HCl in the same microscope slide, side by side (Fig. 31). This was repeated 4 times for each sample to maximize the opportunities to find defining characteristics.

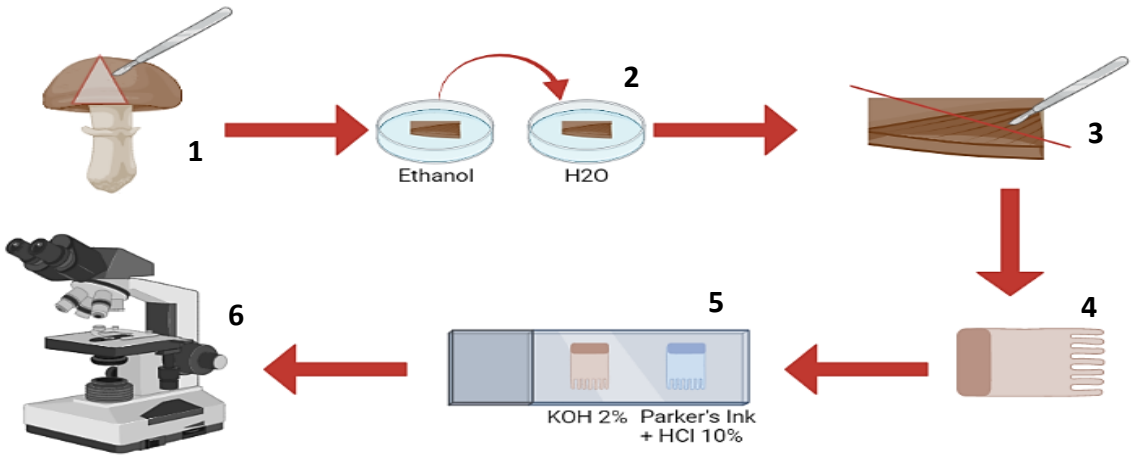


Figure 31 – Preparation process of the microscope slide. 1 – Cutting a small section of the cap; 2 – Washing in ethanol and rehydrating in distilled water; 3 – Thinly slicing the cap section; 4 – Aspect of the thin slice; 5 – Mounting on a microscope slide in KOH 2% and Parker's Ink + HCl 10%; 6 – Observing under the microscope. Created with BioRender. Image not to scale.

The slides were observed in a Leica bright-field microscope with a camera attached that allowed for image taking in real time with automatically generated scales. This allowed for later measurements of the structures in the images. The important structures that were looked for were trama (and its organization), hyphae, clamp connections, spores, basidia, asci, and cystidia (Fig. 32). Other structures, like ornate cells, hairs, and cuticle, were also assessed and recorded (Fig. 33). The micromorphological evaluation allowed for confirmation of proposed identifications in most cases.

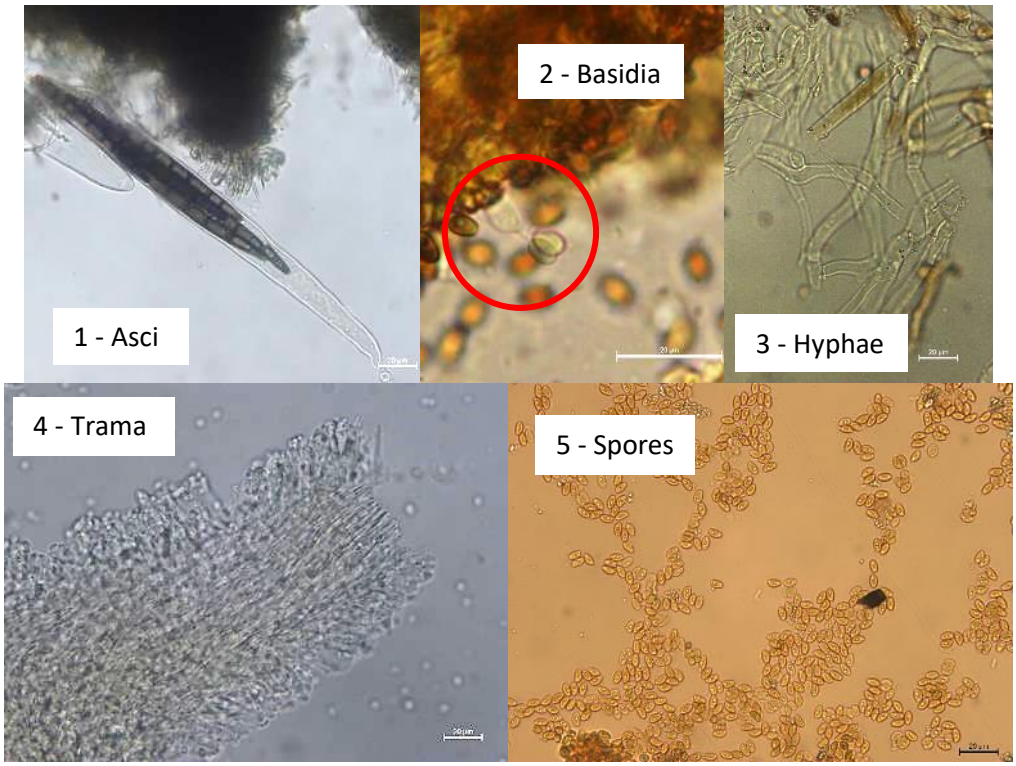


Figure 32 – Examples of micromorphology structures. 1 – Asci, 2 – Basidia, 3 – Hyphae, 4 – Trama, 5 – Spores.

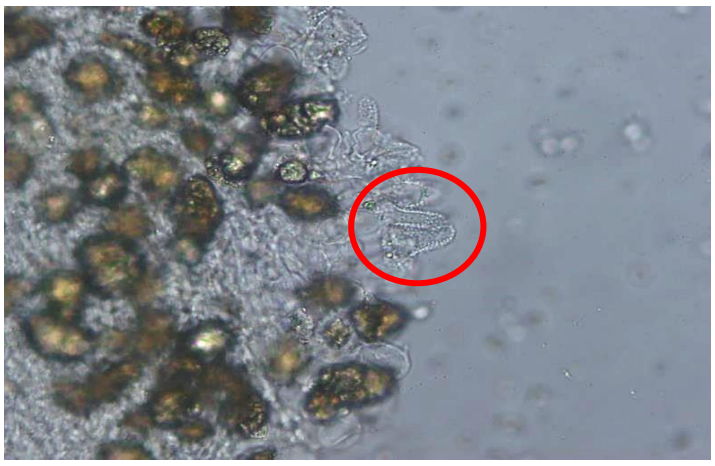


Figure 33 – Ornate cells

2.4. Herbarium vouchers

2.4.1. Drying and storing

The fresh mushrooms were dried in a food dehydrator at 40º C (Fig. 34) for as long as it took for the samples to be completely dehydrated. This process usually stretched for several days due to electricity cuts. The samples were always accompanied by the label that was attached in the field to avoid confusions. The smaller mushrooms (like those belonging to the *Marasmius* and *Mycena* genera) that could go through the gaps in the dehydrator's trays were kept inside a cupcake liner to keep them in place.

Figure 34 – On the left, a food dehydrator with mushrooms inside; On the right, the same mushroom as before, but already dried.

When the mushrooms were completely dried, they were then transferred into zip-lock plastic bags labelled with the collection number, sample site, date and proposed identification (Fig. 35). The bag contained the label that accompanied the mushrooms from the field and indicator silica, that was changed as often as needed to make sure the moisture content was very low. These bags were later turned into herbarium vouchers by adding a standardized tag. When it was possible, the samples were split into duplicates to keep two separate records of each sample, one deposited in COI and one deposited in STPH. A duplicate was established either separating mushrooms from the same sample into two bags or keeping halves of a single mushroom in separate bags.

Figure 35 – Examples of dried samples in the prepared zip-lock bags.

2.4.2. Informatization

The information concerning each sample was informatized in iNaturalist and Specify. Specify (Fig. 36) is a tool developed by the University of Kansas, USA, already used by COI and that allows its catalogue to be digitalised and easily accessible. The iNaturalist (Fig. 37) observations (including field and lab photos) were uploaded as a way to make the information easily accessible for public discussion, as it is a citizen science platform.

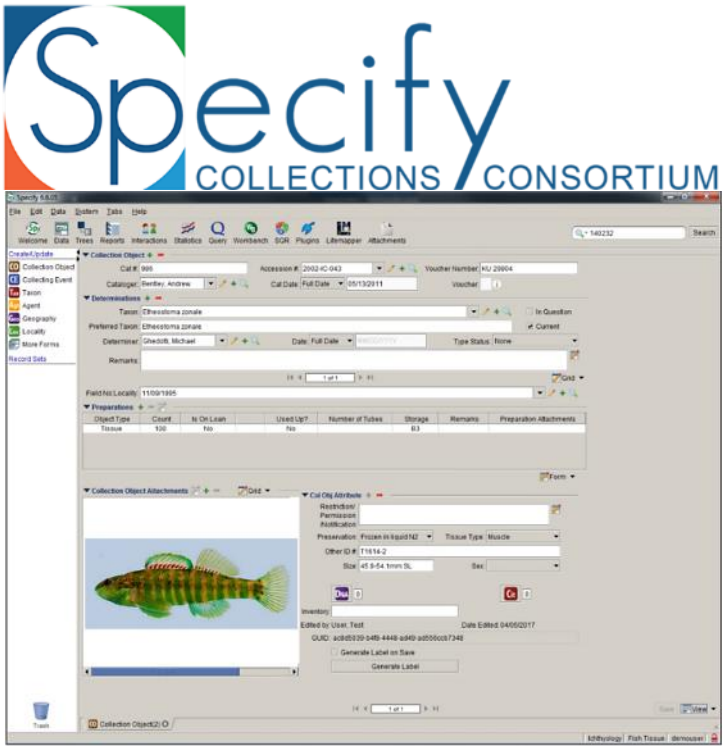


Figure 36 – Example of the main page of the Specify software. Source: https://www.specifysoftware.org/products/specify-6/

Figure 37 – Example of an entry in iNaturalist. https://www.inaturalist.org/observations/47653539

3. Results and Discussion

3.1. Species previously described for São Tomé's Island

A bibliographic survey enabled us to find eighteen publications pertaining to fungi from São Tomé's Island, dated from 1855 to 2019. From these, a total of 244 species were described for São Tomé's Island (Annex I). These belonged to 110 genera. Noteworthy that the species reported for the other islands of the archipelago of Republic of São Tomé e Príncipe were not considered.

From 1855 to 1921, 333 species were referenced for the Island in different publications (Table 3). These older records can be dubious because they rely solely in morphological features, and we cannot ascertain if the identified species weren't biased due to the familiarity of the identifiers with European funga. For example, *Agaricus sylvaticus*, a species closely associated with conifers (mainly *Pinus* sp.) in Europe and North America was reported by Coutinho in 1921 for São Tomé's Island (Coutinho, 1921), even though the Island only has one species of gymnosperm (*Afrocarpus mannii*) that is not even closely related to *Pinus* sp.. Nonetheless, considering that identifications are correct, and after a synonymy update, 168 species (some synonyms eliminated species that were once thought to be separated) were determined to be reported for the Island, 16 being new to science.

Table 3 – Number of mushroom species reported per article for São Tomé's island from 1851 to 1944.

Reference	**N. of Species**	**N. of new records**	**N. of new species**
Fries, 1851	6	6	0
Winter, 1886	34	34	0
Saccardo & Berlése, 1889	84	76	6
Bresadola & Roumeguère, 1889	21	0	0
Bresadola, 1891	12	7	0
Coutinho, 1921	75	38	10
Exell, 1944	11	7	0

Elias Fries publication from 1855 (Fries, 1855) identified samples collected by Krebs in the Island. He reported five species and one variety, all new to the island but not new to science. The families represented were Auriscalpiaceae, Hymenogastraceae, Panaceae, and Polyporaceae which belong to the Ascomycota phylum. Fries didn't mention the sampling sites, only referring that the mushrooms were collected in the island. This is a stand-alone work, the samples analysed were no used in subsequent works.

The works published from 1886 to 1891 were all based on the same collection established by Adolph Möller, Francisco Dias Quintas and Francisco Newton from 1885 to 1887. This collection started when Möller travelled to São Tomé e Príncipe in 1885 to study the flora and its potential agroforestry uses. The local funga was abundant and the opportunity to sample it arose, seeing as the expedition was organized by University of Coimbra's Botanical Garden, which at the time was directed by Júlio Henriques (Perpétuo et al., 2012). Júlio Henriques was able to ask for help to Heinrich Georg Winter in identifying the samples. This was the starting push needed to the study of Santomean funga.

Heinrich Georg Winter published the result of his work on the samples collected by Adolph Möller in 1885 and later by Francisco Dias Quintas (Winter, 1886) in the Portuguese Journal "Boletim da Sociedade Broteriana" in 1886. He refers in his text that every new exploration brings forth a great number of new species ("[…] *No estado actual sobre cogumelos exóticos e mais particularmente sobre as especies tropicaes, não deve causar admiração o número considerável de espécies novas que cada nova exploração faz conhecer*…"[9]), seeing as his publication provided 34 new reports (33 species and one variety) for the island, although none were new species for science. By this time, the Island already had 40 reported species. The Ascomycota phylum is represented by the families Hypoxylaceae, Pezizaceae, and Xylariaceae. The Basidiomycota phylum is represented by the families Auriculariaceae, Cerrenaceae, Hymenochaetaceae, Incrustoporiaceae, Meripilaceae, Mycenaceae, Polyporaceae,

[9] "In the current state about exotic mushrooms and more particularly about tropical species, the number of new species each new exploration makes known shouldn't cause admiration", free translation

Rickenellaceae, Schizophyllaceae, and Stereaceae. Winter mentions the sampling sites in detail, including references to elevation, citing 17 sampling sites.

Pier Andrea Saccardo and Augusto Napoleone Berlése published a review of Winter's work in 1889 in the French Journal "Revue Mycologique"(Saccardo *et al.*, 1889). This publication included the specimens collected by Möller and Quintas in 1885 and a few others collected by Francisco Newton in 1887. The authors mention that they were not able to get in communication with Winter at the time of publishing, therefore the article was not reviewed by him. The number of reported species for the Island raised to 116. The most represented family was Polyporaceae with 24 species. This reflects the fact that the initial expedition (by Möller) was done in the context of investigating the flora (Perpétuo *et al.*, 2012). Polyporaceae mushrooms are mostly parasitic, feeding on living trees, and often have perennial fruit bodies, which means they are easier to find associated with flora than soil-bound mushrooms.

Giacomo Bresadola and Casimir Roumeguère worked on identifying the specimens that Winter couldn't and to confirm the identifications made prior (by Winter, and Saccardo and Berlése), publishing the results in 1890 also in the French Journal "Revue Mycologique" (Bresadola *et al.*, 1890). They did this by comparing the dried samples from São Tomé to European type specimens. This methodology presents a problem in itself as we now know that European funga is very different from African funga (Větrovský *et al*., 2019). This work mentions only 21 species for São Tomé, none of them new records for the Island. This is expected as the efforts were mainly focused on the specimens that remained unidentified, which were mostly from the Island of Príncipe. The 21 species belong to 11 families, the most represented being Polyporaceae with 6 species. The authors mention detailed sampling site information.

Giacomo Bresadola updated Winter's work in a single publication in 1891 (Bresadola, 1891). The main goal was to provide information regarding the sampling sites that was lacking in Winter's work. This resulted in 11 species being mentioned, 7 as new reports for the Island but not new to science. The most represented Family was Xylariaceae with 5 species. This diverges from previous works (dominated by the Polyporaceae family) and reinforces the importance of this small publication. This work was vital in closing the chapter for works related to Möller's collection.

A new phase of mycological exploration begun in 1921, with new samples and new expeditions to the Island. Also, new mycologists and botanists start exploring Santomean mushrooms and give a new perspective on the island's mycodiversity.

António Xavier Pereira Coutinho published a stand-alone work in the Portuguese Journal "Anais do Instituto de Agronomia" in 1921, related to the Macrofungi of São Tomé e Príncipe (Coutinho, 1921). It was based on a collection established from March to June 1920 by Manuel de Sousa da Câmara and Martinho de França Pereira Coutinho (the author's son), both working for a Phytopathology Lab. Coutinho's approach to species determination differs from the previous authors. Instead of comparing the specimens to European mushrooms, Coutinho tried to compare them to literature and type specimen from similar habitats. He mentions how difficult it was to find reference literature for Santomean funga and that his work may have described as new species that are in fact not due to the lack of references. His work mentions 75 species, 38 new records for the Island and 10 new species for science. The most represented family was Polyporaceae with 30 species. This makes sense considering the nature of the collectors' work (phytopathology) as this family is closely associated with living trees.

Arthur Wallis Exell, a botanist and plant taxonomist, published a "Catalogue of the vascular plants of S. Tomé" in 1944 (Exell, 1944). In that book he added an appendix where he mentions

Mushrooms (and a Slime Mold, *Lycogala epidendrum*) that he found on his expedition to the island. This was a very short list because, as the author himself mentioned, he wasn't a mycologist so his knowledge on this matter was limited. He found the fungal diversity noteworthy and therefore decided to complement the Vascular Plant Catalogue with a few honourable fungal mentions. The book reports 11 species, 7 new reports to the Island, non-new to science. This was the last effort made to publish about Santomean funga before a hiatus of 65 years.

Roughly in the last decade (2009 to 2019), almost 100 species were reported for São Tomé in nine publications (Table 4). Of these, 33 species had been reported previously, meaning that 64 species were new records for the Island. Noteworthy, of these 64 species, 26 (ca. 41 %) were new to science. This is way higher than the estimated annual percentage for new species discovery in Africa, which was around 9% in 2019 (Antonelli *et al*., 2020). This shows that African funga remains mostly undiscovered, mostly due to a lack of effort in exploring the Fungi kingdom. These newer works mark a new step in spreading the knowledge on Santomean mushrooms because they integrated free access DNA Barcoding sequences of the samples.

Table 4 - Number of species reported for São Tomé's island from 2009 to 2019.

Reference	**N. of species reported**	**N. of new records to the island**	**N. of new species to science**
Desjardin & Perry, 2009	1	1	1
Decock, 2011	3	3	2
Degreef *et al.* 2013	2	2	0
Desjardin & Perry, 2015a	1	1	1
Desjardin & Perry, 2015b	11	5	0
Desjardin & Perry, 2016	24	15	4
Desjardin *et al.*, 2017	1	1	0
Desjardin & Perry, 2017	22	22	2
Cooper *et al.* 2018	14	14	9
Desjardin & Perry, 2018	5	5	2
Grace *et al.* 2019	15	15	6

Dennis Desjardin and Brian Perry travelled to the Republic of São Tomé e Príncipe in April 2006 and April 2008 in the scope of a multi-organism expedition to the Island sponsored by the California Academy of Sciences and thought of by Robert C. Drewes (Herpetologist). These expeditions spurred 7 publications from Desjardin, Perry and collaborators (Desjardin *et al.*,

2017; Desjardin *et al*., 2016; Desjardin *et al*., 2009, 2015b, 2018; Grace et al., 2019), the first of which, in 2009, names a mushroom in homage to Robert C. Drewes: *Phallus drewesii*.

The first work from Desjardin and Perry is a complete and thorough species description of *Phallus drewesii* (Desjardin *et al*., 2009). This publication is dedicated exclusively to this Phallales species which is both a new record for the Island and a new species to science. This was the first sample from São Tomé to have its DNA barcoding information uploaded to a public platform.

Cony Decock dedicated an article in the Journal "Cryptogamie" describing one species: *Truncospora oboensis* (Decock, 2011). The purpose of this work, initiated with a field trip to PNOST in April 2011, was to separate this new species from other closely related ones found in the island. The work mentions 3 species, all of them being new records and one a new species to science (*Truncospora oboensis*). This was a great development to the restructuring of the genus *Truncospora* which now counts with 2 sub-Saharan species. The families represented were the Hymenochaetaceae and Polyporaceae families, being in accordance with the tendencies established in earlier works.

Jérôme Degreef, Mario Amalfi, Cony Decock and Vincent Demoulin published a work (a continuation of Decock's field trip in 2011) in the Journal "Cryptogamie" (Degreef *et al*., 2013) were they mention 2 species: *Blumenavia angolensis* and *Mutinus zenkeri*. This brings a spotlight on the Phallales family once again, as both species belong to that Basidiomycota family. These are new records for the Island but are not new to science. Both species were considered rare at the time of publishing.

In 2015, Desjardin and Perry published two articles in the journal "Mycosphere" reporting the Clavarioid and Gasteromycete fungi they had found in their expeditions in 2006 and 2008. The first was a full description of the species *Scytinopogon havencampii* (Desjardin & Perry, 2015a), both a new record for the Island and a new species for science. *S. havencampii* belongs to the Hydnodontaceae family and to the Basidiomycota phylum. The second (Desjardin & Perry, 2015b), reported 11 species of Clavarioid and Gasteromycete fungi (including the aforementioned *S. havencampii*), five being new records for the Island but not new to science. The families represented were Agaricaceae, Geastraceae, Gomphaceae, Hydnodontaceae, Phallaceae and Psathyrellaceae, being fairly even in species richness.

In 2016, Desjardin and Perry published the Dark-spored species of Agaricineae, once again in the journal "Mycosphere" (Desjardin *et al*., 2016). This publication reported 24 species from the samples collected in 2006 and 2008, 15 of those new records for the Island and four new species for science. This article diverges from the earlier works, that mainly reported Polyporaceae fungi, by shedding light in the Agaricineae group. Members of Agaricineae from the island were mentioned before in previous works, but never on a dedicated publication. The most represented families are Hymenogastraceae and Psathyrellaceae with seven species each. As mentioned before, this is a dissonance from the earlier works, dominated by the Polyporaceae Family.

In 2017, two articles led by Desjardin were published in the journal "Mycosphere", both from materials collected in the expeditions in 2006 and 2008. The first, mentions only one species for São Tomé Island, *Campanella buettneri*, a species that belongs the Marasmiaceae family and to the Basidiomycota phylum (Desjardin *et al*., 2017). This constitutes a new record for the island but not a new species for science. It is interesting to note that the specimen collected on the island were able to be used to redescribe and epytify the species. The second, lists the Gymnopoid fungi (Basidiomycota) the authors found in the island. This work lists 22 species, all of them new records to the island, and 2 new species for science (Desjardin *et al*., 2017). Like

the Agaricinae fungi, these are species that don't go along with the Polyporaceae monopoly of earlier times. The most represented family was Omphalotaceae with 11 species.

Alexandra Cooper, Desjardin and Perry published a study on the *Mycena* genus in São Tomé Island in the journal "Phytotaxa"(Cooper *et al*., 2018). In this work, the authors mentioned 14 species identified from the samples collected in 2006 and 2008, all new records for the Island, 9 of which new species to science. The *Mycena* genus is a very complex group of Fungi with many morphologically similar species. In this specific article, molecular tools were of the essence for species identification. The only represented family was Mycenaceae from the Basidiomycota phylum.

In 2018, Desjardin and Perry once again in the Journal "Mycosphere", this time an article dedicated to genus *Pluteus*, from samples collected in their expeditions in 2006 and 2008. This article mentions five species, all new records for the island, two of which new species for science. The Basidiomycota family Pluteaceae was scarcely mentioned in previous publications, making this an important contribution to the knowledge of São Tomé's pink-gilled mushrooms.

In 2019, Grace *et al*. reviewed the material collected in 2006 and 2008 and compiled a list for species of the *Marasmius* genus (Grace *et al*., 2019). This work mentions 15 species, all new records to the Island, 6 new species to science. Like the work on the *Mycena* genus, molecular tools were essential in the identification process, proving once again that modern mycology needs to go hand-in-hand with DNA Barcoding.

Overall, the 244 reported species belong to 55 families (Fig. 38). The most represented family overall was Polyporaceae with 52 species, which goes accordingly with the earlier works. Most families belonged to the Basidiomycota phylum (ca. 92%), except for Cordycipitaceae, Cudoniaceae, Hypoxylaceae, Nectriaceae, Pezizaceae, Pezizellaceae, Pyronemataceae, and Xylariaceae, that belong to the phylum Ascomycota. The phylum Basidiomycota was represented by 224 species and the phylum Ascomycota was represented by 20 species. The species that was mentioned more times through out the articles was *Schyzophyllum commune*, mentioned five times (Winter, 1886; Saccardo & Berlese, 1889; Bresadola & Roumeguère, 1890; Coutinho, 1921; Exell, 1944)

The fungal species that was mentioned more times in the literature regarding São Tomé's funga was *Schyzophyllum commune*, mentioned five times (Winter, 1886; Saccardo & Berlese, 1889; Bresadola & Roumeguère, 1890; Coutinho, 1925; Exell, 1944).

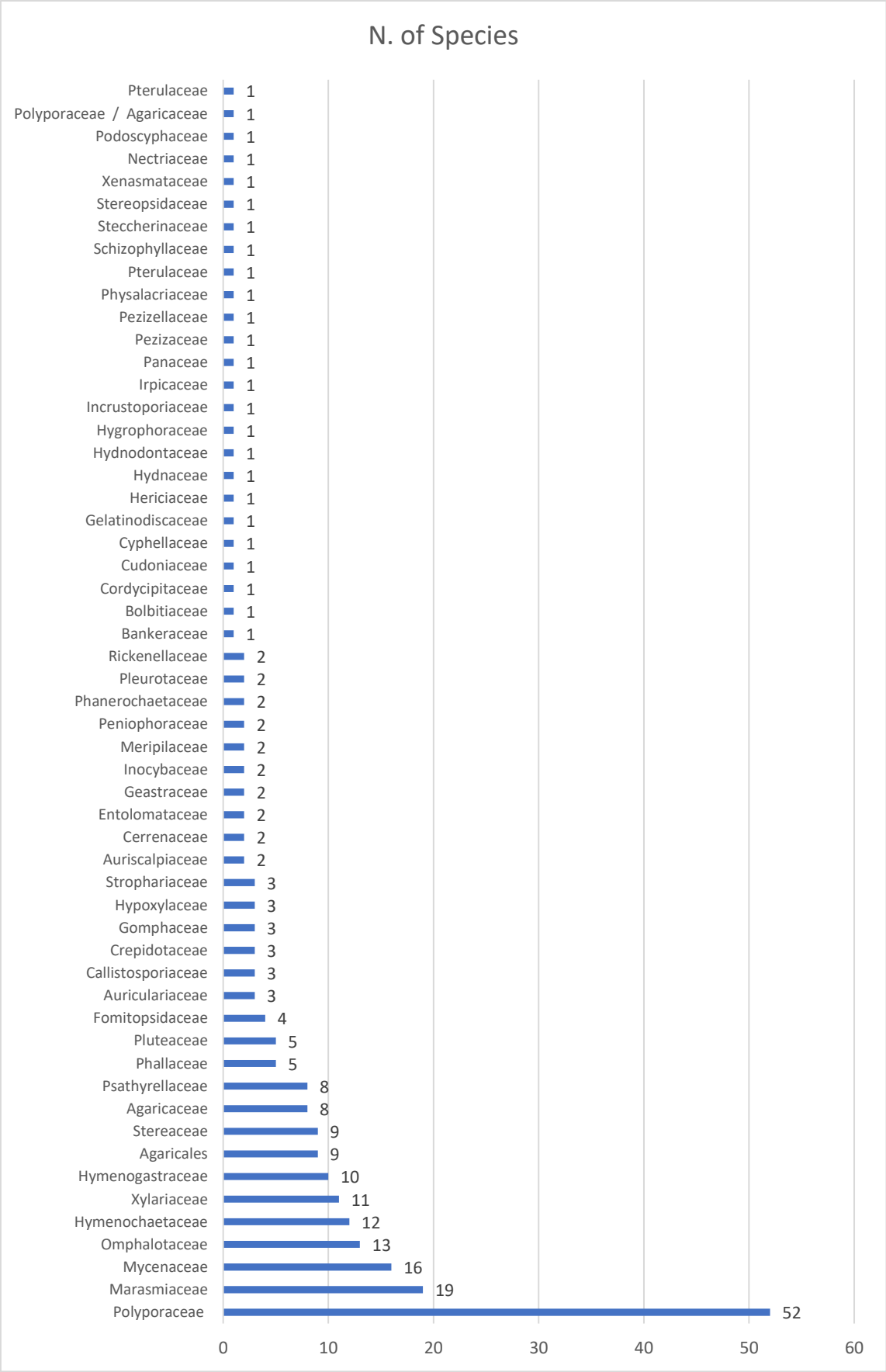


Figure 38 – Number of species per family. The families were sorted in from smaller to bigger, and in the case of families with the same number of species, alphabetically.

All the previous records are from primary Cloud Forest and secondary Forest, which only covers a part of the existing habitats. This suggests that the species diversity is far greater than what is already known, as the drier habitats were left unexplored. Most species reported were saprobes, with a few being also parasitic. This is a common pattern in Africa, as most trees have endomycorrhiza instead of ectomycorrhiza (Bâ *et al*., 2012). There was one report of an entomopathogenic fungus, the species *Isaria arbuscula* (Saccardo *et al*., 1889).

3.2. Species collected in this study

3.2.1. Identified species

From the 181 samples collected in total (Annex II), 27 identifications have been proposed, comprising 24 genera belonging to 16 families and 2 phyla (table 5). It is important to note that when a site had more than one macroscopically similar mushroom, they were considered the same sample. These 28 species only represent 45 of 181 samples since some samples were impossible to identify without DNA sequencing. Additionally, we were able to identify 20 genera to which we couldn't reach species identification (Table 6). These genera were not used to ascertain species richness because we could not guarantee that the samples identified as the same genus were the same species. They are, however, important to note as some are genera and families that are new records to the island.

Table 5 – List of species identified from the samples collected in São Tomé's island in 2019. New reports to the island are in bold.

Phylum	**Family**	**Species**	**N. of samples**
Ascomycota	Hypoxylaceae	*Daldinia concentrica*	1
	Xylariaceae	***Xylaria hypoxylon***	1
		Xylaria telfairii	1
Basidiomycota	*Incertae sedis*	*Cyathus limbatus*	1
	Agaricaceae	***Leucocoprinus birnbaumii***	1
		Leucocoprinus fragilissimus	3
	Aphelariaceae	*Aphelaria subglobispora*	1
	Auriculariaceae	***Auricularia cornea***	3
		Exidia nucleata	1
	Clavariaceae	*Clavulinopsis amoena*	2
	Geastraceae	*Geastrum schweinitzii*	2
	Hydnaceae	***Cantharellus rufopunctatus***	1

	Lycoperdaceae	***Calvatia rugosa***	2
	Mycenaceae	*Heimiomyces tenuipes*	2
		Mycena alphitophora	1
		Trogia anthidepas	1
		Trogia infundibuliformis	2
	Phallaceae	*Blumenavia angolensis*	1
		Mutinus zenkeri	1
		Phallus drewesii	1
		Phallus indusiatus	2
	Pleurotaceae	*Pleurotus tuber-regium*	2
	Pluteaceae	***Volvariella esculenta***	1
	Polyporaceae	***Lentinus squarrosulus***	2
		Trametes villosa	1
	Strophariaceae	*Hypholoma fasciculare*	4
	Tremellaceae	***Tremella fuciformis***	2

Table 6 - List of genera identified from the samples collected in São Tomé's island in 2019. New reports to the island are in bold.

Phylum	**Family**	**Species**
Ascomycota	Helotiaceae	***Hymenoscyphus* sp.**
	Xylariaceae	*Xylaria* sp.
Basidiomycota	*Agaricaceae*	*Agaricus* sp.
	Auriculariaceae	*Auricularia* sp.
	Clavariaceae	*Clavaria* sp.
	Dacrymycetaceae	***Dacrymyces* sp.**
	Fomitopsidaceae	***Antrodia* sp.**
	Geastraceae	*Geastrum* sp.
	Marasmiaceae	*Marasmius* sp.
	Mycenaceae	*Favolaschia* sp.
		Campanella sp.
	Panaceae	*Panus* sp.
	Pluteaceae	*Volvariella* sp.
	Polyporaceae	*Ganoderma* sp.
	Ricknellaceae	***Cotylidia* sp.**
	Sebacinaceae	***Tremellodendron* sp.**
	Stereaceae	*Stereum* sp.
	Strophariaceae	*Hypholoma* sp.
		Pholiota sp.
	Thelephoraceae	*Thelephora* sp.

The most represented phylum was the Basidiomycota (Fig. 39), making up ca. 90% of the total of identified species with a total of 25 species. This might be demonstrative of collector's bias as the fruiting bodies were, in part, collected with the intent of identifying edible and medicinal species. Therefore, the more "typical" carpophores of Basidiomycota (either shelf fungi or mushrooms) were more collected.

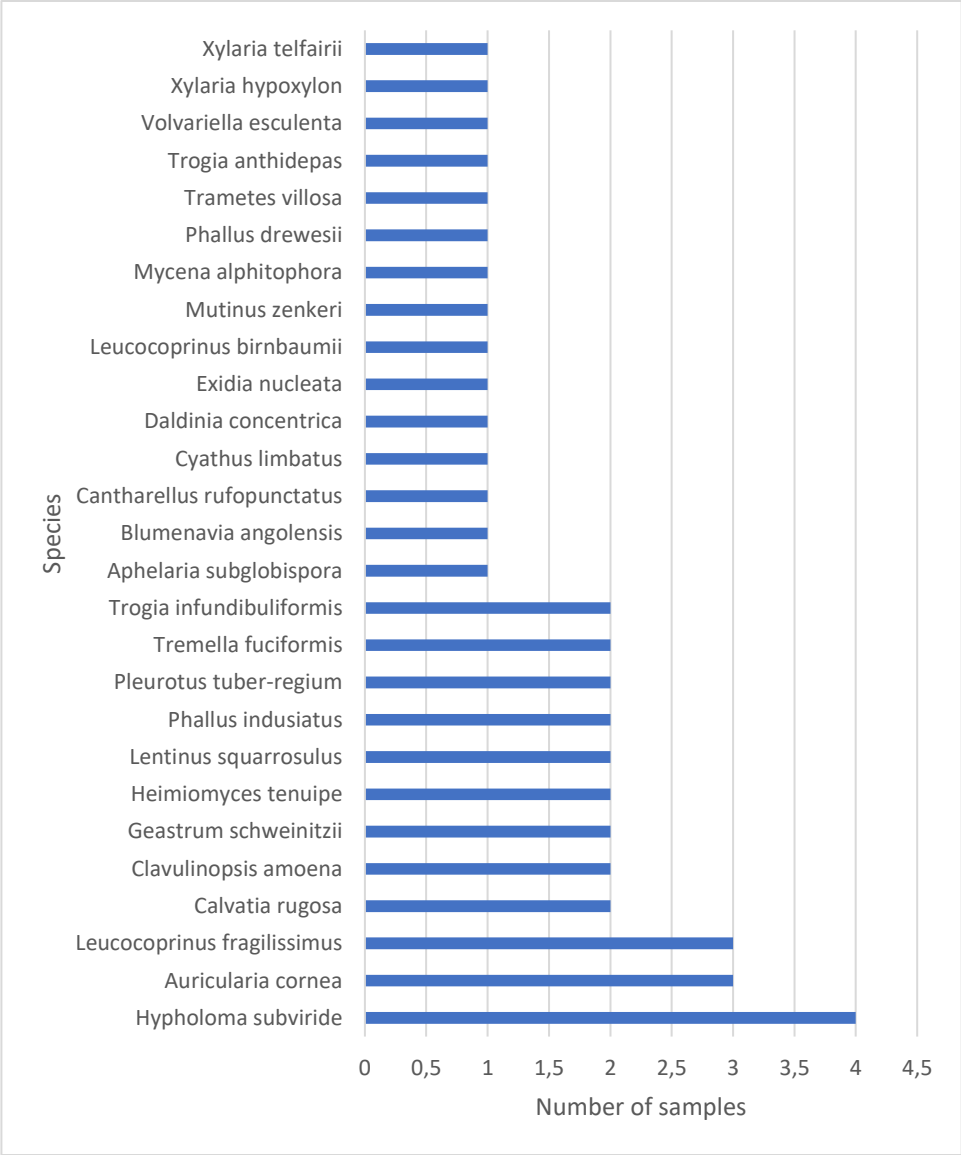


Figure 39 – Number of samples per species. The species were sorted from smaller sample number to bigger.

The two most represented families were Mycenaceae and Phallaceae, with 5 (*Favolaschia* sp., *Heimiomyces tenuipes*, *Mycena alphitophora*, *Trogia anthidepas*, and *Trogia infundibuliformis*) and 4 species (*Blumenavia angolensis*, *Mutinus zenkeri*, *Phallus drewesii*, and *Phallus indusiatus*), respectively (Fig. 40). This contradicts the earlier literature, clearly dominated by the Polyporaceae family, and supports the more recent works. This fact indicates that a fungal survey done intentionally for that, results in fewer Polyporaceae mushrooms being found since soil-bound mushrooms take the focus (collectors bias).

Hypholoma fasciculare (Strophariaceae) was the most encountered mushroom, collected four times. This species is not a new record, being mentioned for the first time in 2016 by Desjardin and Perry, at the time referred to *Hypholoma* aff. *subviride* (Desjardin *et al*., 2016). *H. subviride* has since been aggregated to *H. fasciculare* as a one species (*Index Fungorum, 27/10/2021*).

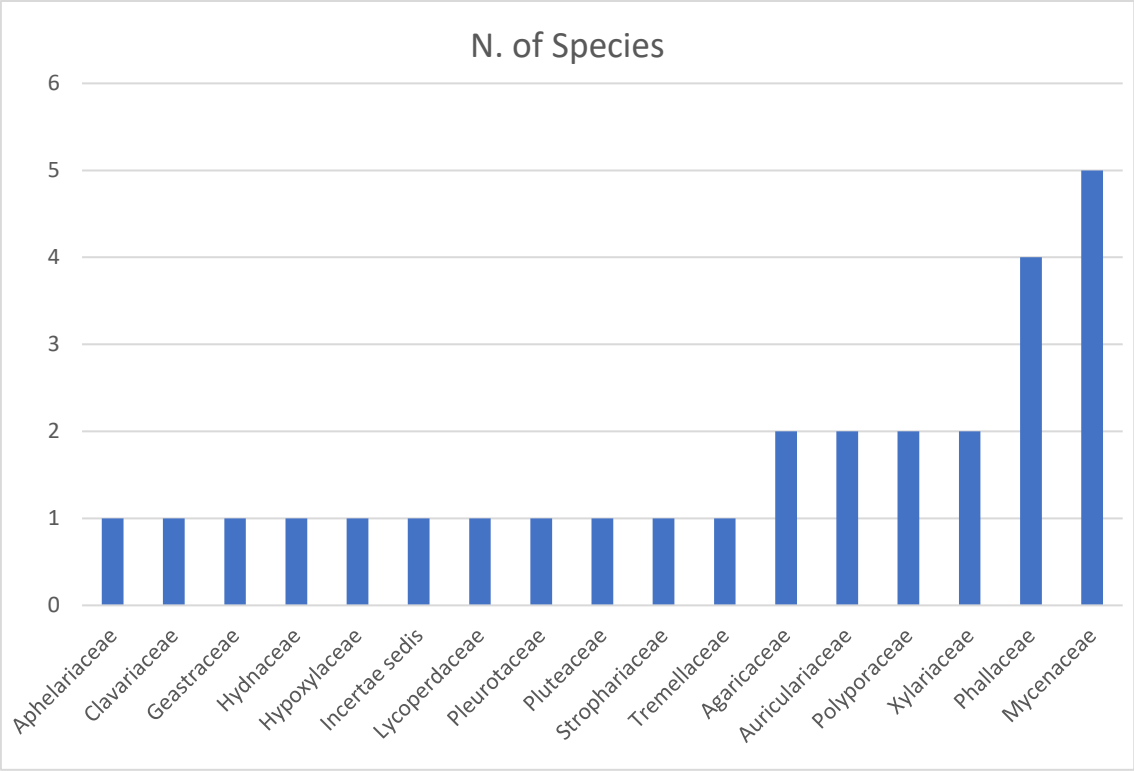


Figure 40 – Number of species per family. The families were sorted in from smaller to bigger.

Out of the 28 identified species, 11 species are new reports for the island. For this identification, only macro and micromorphological characteristics were evaluated. The micromorphological data collected was used to confirm the identifications made by observing the macromorphological characteristics. The mycological files for each of the 28 species identified are below (Fig. 41 – 67). The molecular analysis of the samples, although planned, was not possible due to the restrictions put in place for the Covid-19 pandemic.

Figure 41 – Information collected on a sample identified as *Aphelaria subglobispora*

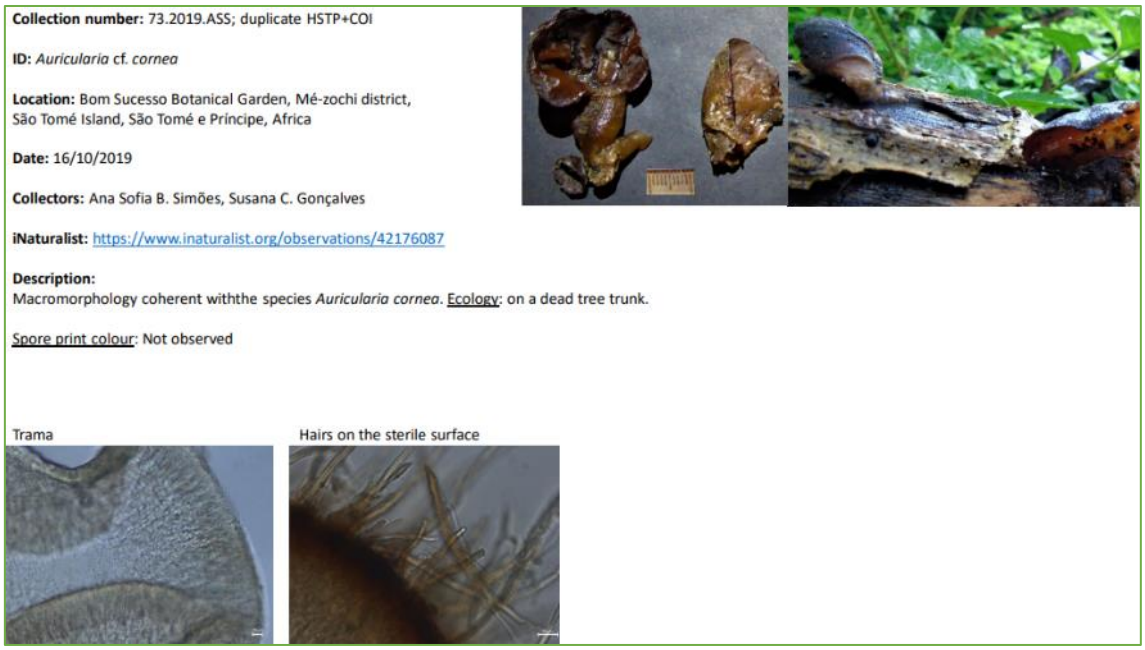


Figure 42 – Information collected on a sample identified as *Auricularia cornea*

Figure 43 – Information collected on a sample identified as *Blumenavia angolensis*

Figure 44 – Information collected on a sample identified as *Calvatia rugosa*

Figure 45 – Information collected on a sample identified as *Cantharellus rufopuncatus*

Figure 46 – Information collected on a sample identified as *Clavulinopsis amoena*

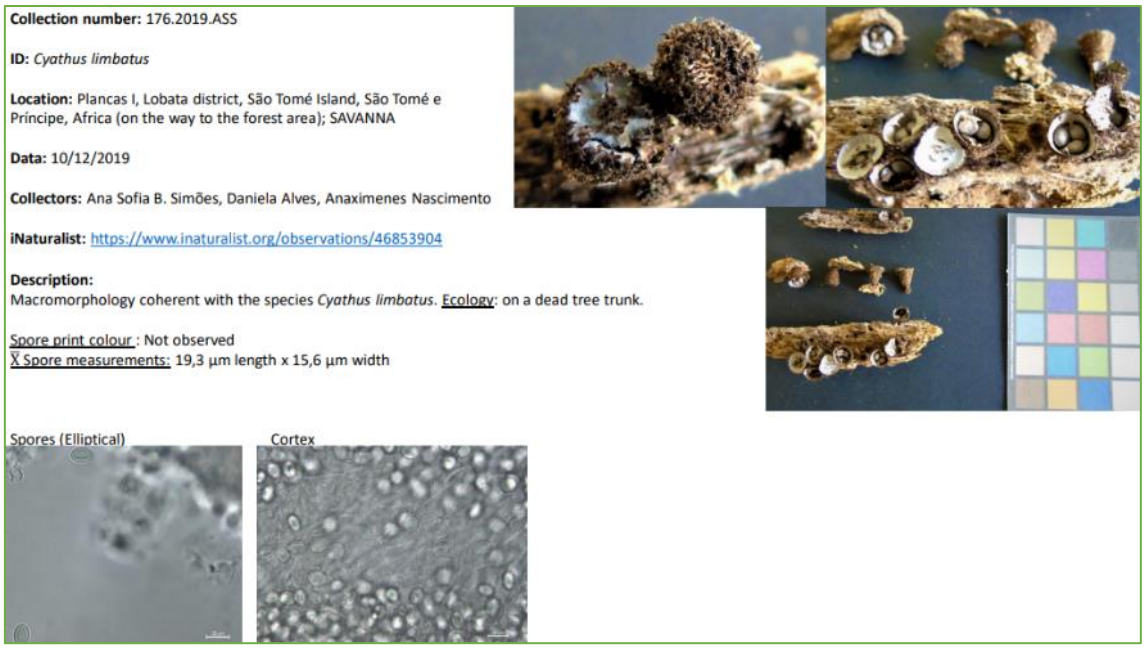


Figure 47 – Information collected on a sample identified as *Cyathus limbatus*

Figure 48 – Information collected on a sample identified as *Daldinia concentrica*

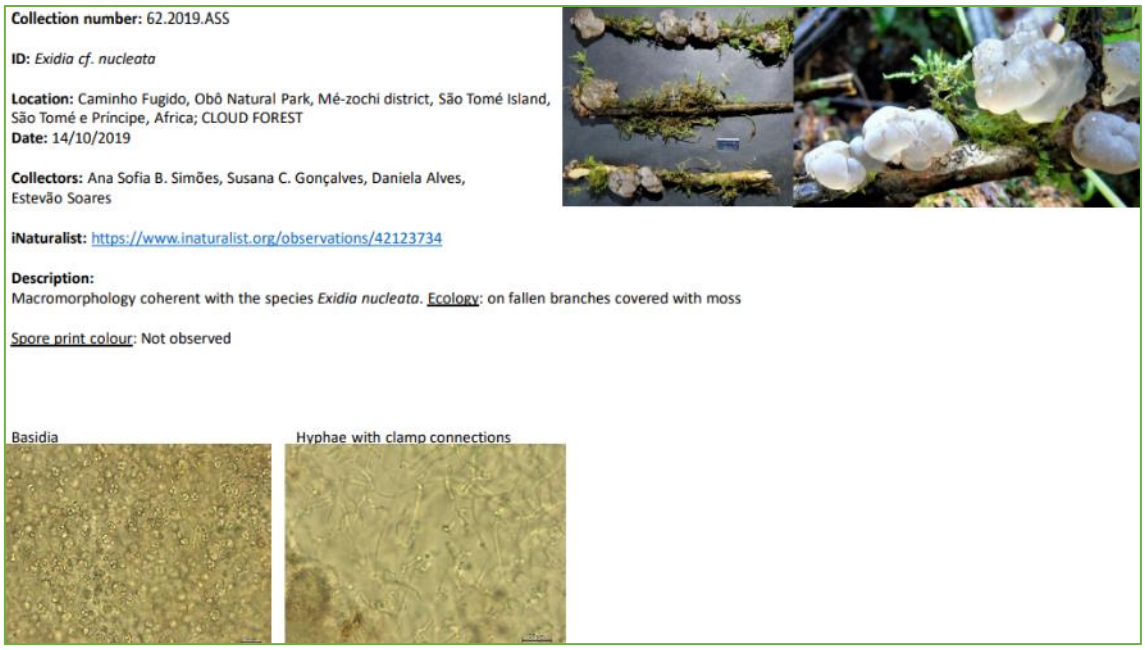


Figure 49 – Information collected on a sample identified as *Exidia nucleate*

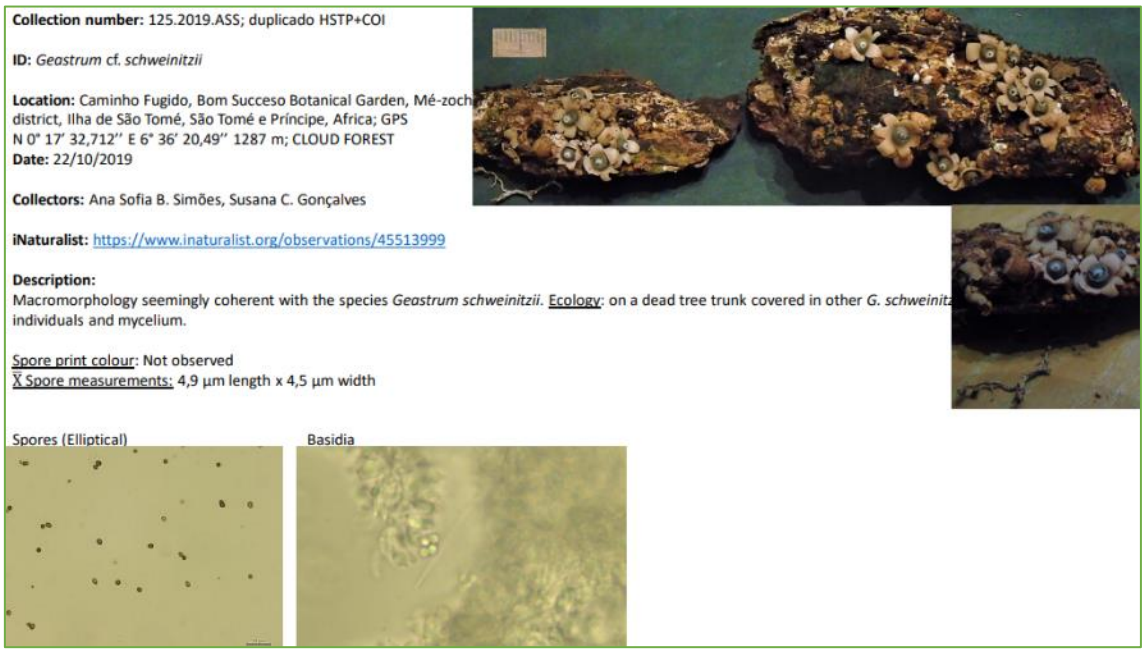


Figure 50 – Information collected on a sample identified as *Geastrum schweinitzii*

Collection number: 61.2019.ASS

ID: *Heimiomyces tenuipes*

Location: Caminho Fugido, Obô Natural Park, Mé-zochi district, São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 17' 25'' E 6° 36' 20'' 1240 m; CLOUD FOREST

Date: 14/10/2019

Collectors: Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares

iNaturalist: https://www.inaturalist.org/observations/42123148

Description:
Macromorphology coherent with the species *Heimiomyces tenuipes*. Ecology: on a fallen branch.

Spore print colour: Not observed

Figure 51 – Information collected on a sample identified as *Heimiomyces tenuipes*

Collection number: 107.2019.ASS; duplicado HSTP+COI

ID: *Hypholoma subviride*

Location: Caminho da Antena, Macambrará, distrito de Mé-zochi, Ilha de São Tomé, São Tomé e Príncipe, Africa; CLOUD FOREST

Date: 21/10/2019

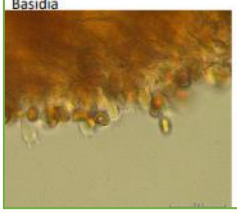
Collectors: Ana Sofia B. Simões, Susana C. Gonçalves

iNaturalist:

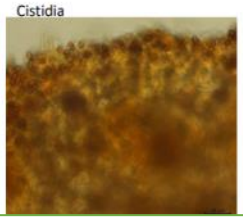
Description:
Macromorphology coherent with the species *Hypholoma subviride*. Ecology: on a fallen log.

Spore print colour: Not observed
$\bar{X}$ Spore measurements: 7,1 µm length x 3,8 µm width

Basidia



Cistidia



Spores (Elliptical)

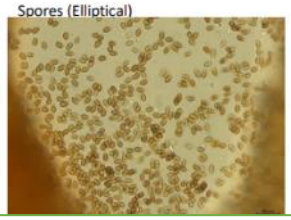


Figure 52 – Information collected on a sample identified as *Hypholoma subviride*, now *Hypholoma fasciculare*

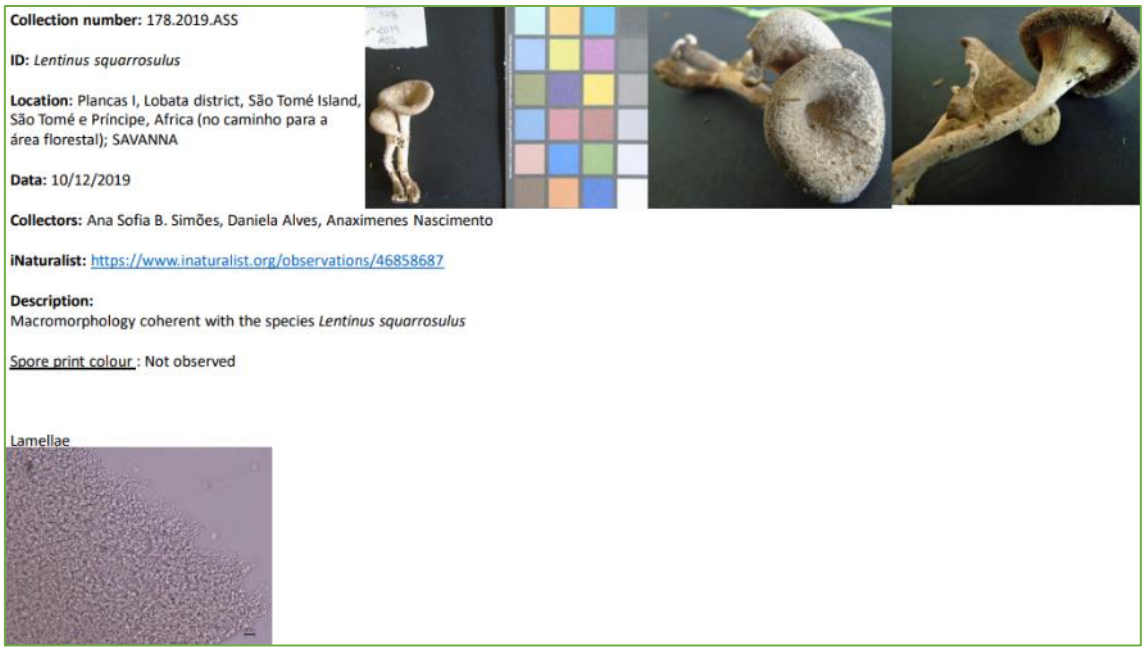


Figure 53 – Information collected on a sample identified as *Lentinus squarrosulus*

Figure 54 – Information collected on a sample identified as *Leucocoprinus birnbaumii*

Collection number: 25.2019.ASS

ID: *Leucocoprinus fragilissimus*

Location: Saudade, Mé-Zochi district, São Tomé Island, São Tomé e Príncipe, Africa; GPS 70; CLOUD FOREST

Date: 6/8/2019

Collectors: Ana Sofia B. Simões, Daniela Alves, Adilson das Neves

iNaturalist: https://www.inaturalist.org/observations/47653539

Description:
Macroscopic description:
Pileus 22 mm Ø, subglobose, crenate covered a Bright-yellow dust, colour white. Context very thin (<1 mm). Lamellae simple, colour white. Stem 56 mm length x 1 mm Ø, central, terete, hollow, colour yellow, with a movable ring, well-defined and very fragile. Odour acidic. Flavour not tested. Bioluminescense not observed. Habit solitary, in soil.

Microscopic description:
Spore print colour: Not observed
$\bar{X}$ Spore measurements: 12,4 µm length x 7,4 µm width

Spores (Elliptical)

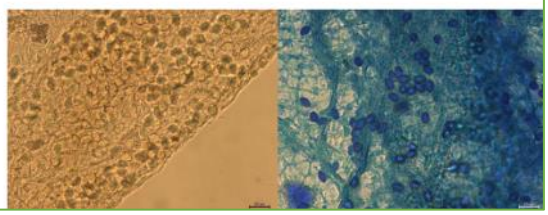


Figure 55 – Information collected on a sample identified as *Leucocoprinus fragilissimus*

Collection number: 121.2019.ASS

ID: *Muntinus zenkeri*

Location: Caminho Fugido, Bom Succeso Botanical Garden, Mé-zochi district, São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 17' 32,61'' E 6° 36' 25,176'' 1282 m; CLOUD FOREST

Date: 22/10/2019

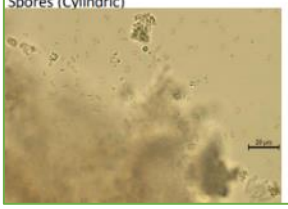
Collectors: Ana Sofia B. Simões, Susana C. Gonçalves

iNaturalist: https://www.inaturalist.org/observations/45016675

Description:
Macroscopic description :
Macromorphology coherent with the species *Mutinus zenkeri*. Ecology: on a fallen log, covered in other *M. zenkeri* individuals and mycelium.

Microscopic description :
Spore print colour: Not observed
$\bar{X}$ Spore measurements: 3,6 µm length x 1,5 µm width

Spores (Cylindric)



"Pleats"

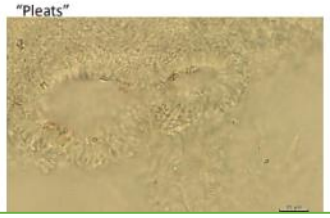


Figure 56 – Information collected on a sample identified as *Mutinus zenkeri*

Collection number: 114.2019.ASS

ID: *Mycena cf. alphitophora*

Location: Caminho da Antena, Macambrará, distrito de Mé-zochi,
São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 16' 31,32'' E 6° 36' 10,29'';
CLOUD FOREST

Date: 21/10/2019

Collectors: Ana Sofia B. Simões, Susana C. Gonçalves

iNaturalist: https://www.inaturalist.org/observations/44298007

Description:
Macromorphology coherent with the species *Mycena alphitophora*. Ecology: on a fallen and dry leaf.

Spore print colour: Not observed

Figure 57 – Information collected on a sample identified as *Mycena alphitophora*

Collection number: 57.2019.ASS

ID: *Phallus drewesii*

Location: Caminho Fugido, Obô Natural Park, Mé-zochi district,
São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 17' 40'' E 6° 36' 20'' 1230 m; CLOUD FOREST
Date: 14/10/2019

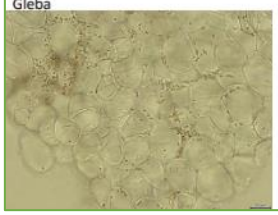
Collectors: Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares

iNaturalist: https://www.inaturalist.org/observations/41787496

Description:
Macromorphology coherent with the species *Phallus drewesii*. Ecology: on a rotting log, covered with *P. drewesii* individuals and mycelium cords.

Spore print colour: brownish-green
$\bar{X}$ Spore measurements: 3,5 µm length x 1,3 µm width

Gleba



Spores (cylindric and short)

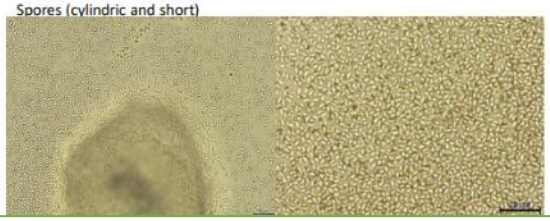


Figure 58 – Information collected on a sample identified as *Phallus drewesii*

Collection number: 171.2019.ASS

ID: *Phallus indusiatus*

Location: Saudade, Mé-zochi district, São Tomé Island, São Tomé e Príncipe, Africa; CLOUD FOREST

Date: 10/09/2019

Collectors: Ana Sofia B. Simões

iNaturalist: https://www.inaturalist.org/observations/46851415

Description:
Macromorphology coherent with the species *Phallus indusiatus*. Ecology: on a roadside, in the soil.

Spore print colour: olive-green
$\bar{X}$ Spore measurements: 3,6 µm length x 1 µm width

Gleba

Spores (cylindric)

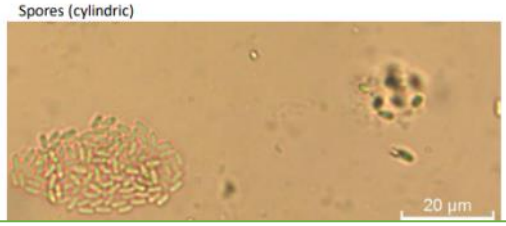


Figure 59 – Information collected on a sample identified as *Phallus indusiatus*

Collection number: 75.2019.ASS; duplicate HSTP+COI

ID: *Pleurotus tuber-regium*

Location: Plancas I, Lobata district, São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 22' 36'', E 6° 35' 39'', 230 m; SAVANNA

Date: 17/10/2019

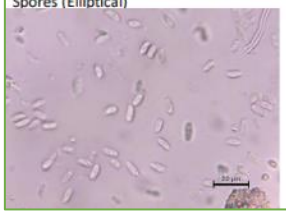
Collectors: Ana Sofia B. Simões, Susana C. Gonçalves, Adilson das Neves

iNaturalist: https://www.inaturalist.org/observations/42253450

Description:
Macromorphology coherent with the species *Pleurotus tuber-regium*. Ecology: on a dead tree trunk (very dry).

Spore print colour: White
$\bar{X}$ Spore measurements: 8 µm length x 3,6 µm width

Spores (Elliptical)



Basidia

Figure 60 – Information collected on a sample identified as *Pleurotus tuber-regium*

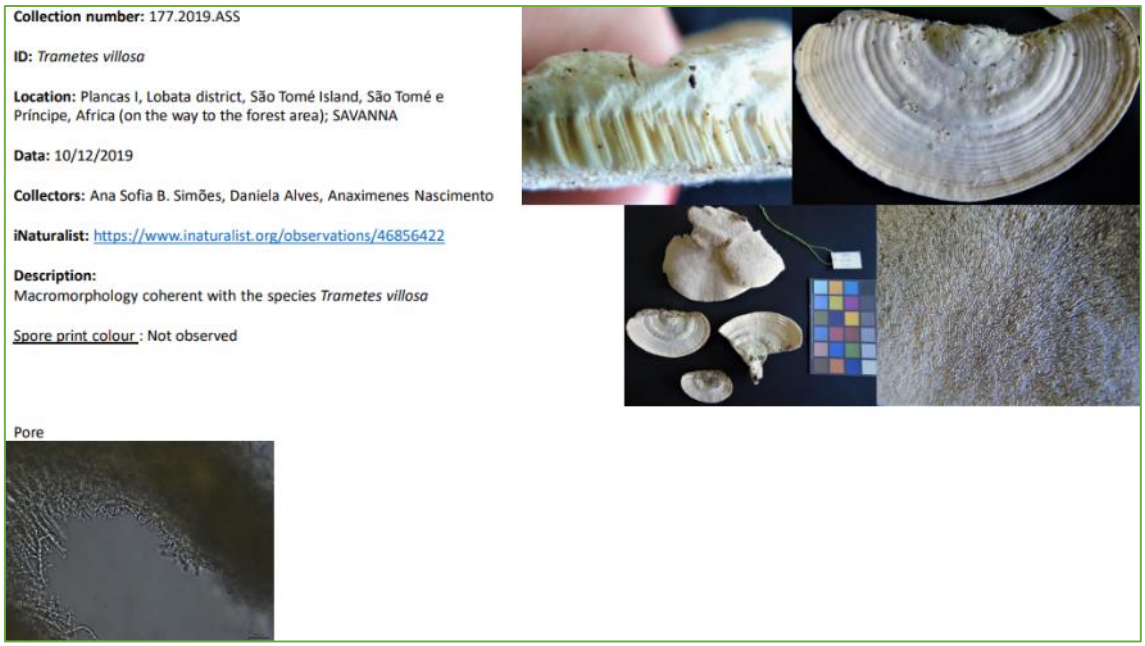


Figure 61 – Information collected on a sample identified as *Trametes villosa*

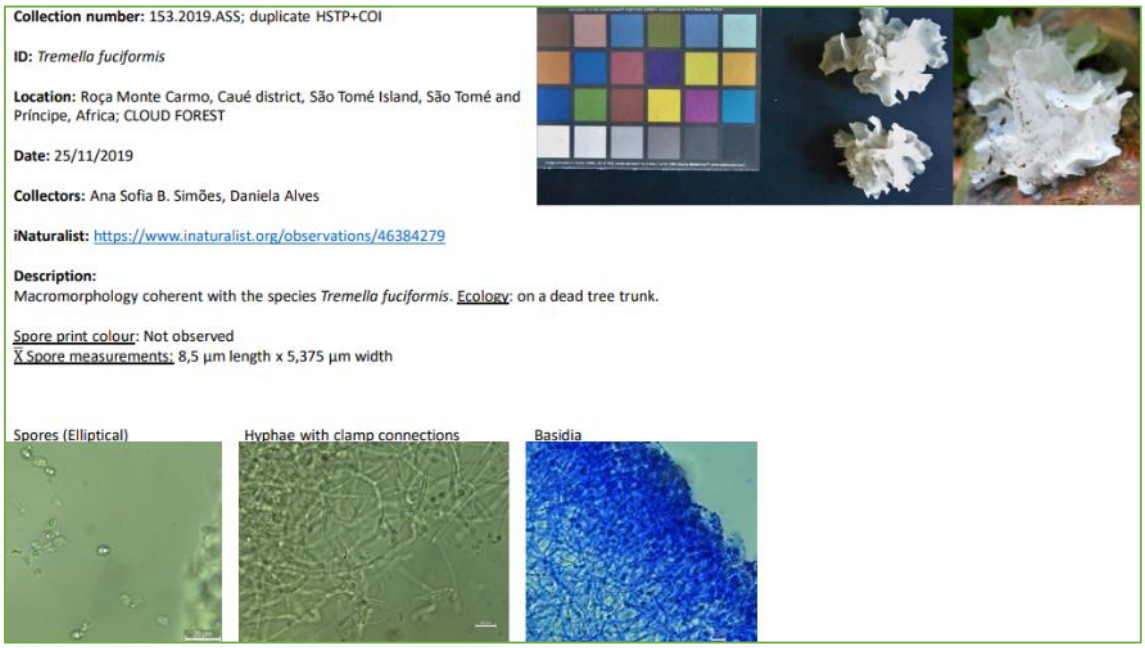


Figure 62 – Information collected on a sample identified as *Tremella fuciformis*

Collection number: 65.2019.ASS

ID: *Trogia cf. anthidepas*

Location: Caminho Fugido, Obô Natural Park, Mé-zochi district, São Tomé Island, São Tomé e Príncipe, Africa; CLOUD FOREST

Date: 14/10/2019

Collectors: Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares

iNaturalist: https://www.inaturalist.org/observations/42163660

Description:
Macromorphology coherent with the species *Trogia anthidepas*. Ecology: on a fallen branch.

Spore print colour: Not observed

Figure 63 – Information collected on a sample identified as *Trogia anthidepas*

Collection number: 151.2019.ASS

ID: *Trogia cf. infundibuliformis*

Location: Roça Monte Carmo, São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 9' 3,69'', and 6° 34' 19,962'', 325 m; CLOUD FOREST

Date: 25/11/2019

Collectors: Ana Sofia B. Simões, Daniela Alves

iNaturalist: https://www.inaturalist.org/observations/46380053

Description:
Macromorphology coherent with the species *Trogia infundibuliformis*. Ecology: on a fallen branch.

Spore print colour: Not observed

Figure 64 – Information collected on a sample identified as *Trogia infundibuliformis*

Collection number: 85.2019.ASS; duplicate HSTP+COI

ID: *Volvariella esculenta*

Location: Plancas I, Lobata district, São Tomé Island, São Tomé e Príncipe, Africa; GPS N 0° 22' 38'', E 6° 35' 37'', 220 m; SAVANNA
Date: 17/10/2019

Collectors: Ana Sofia B. Simões, Susana C. Gonçalves, Adilson das Neves
iNaturalist: https://www.inaturalist.org/observations/42693288

Description:
Macroscopic description:
Pileus 70-100 mm Ø, initially ovoid then convex-subumbonate, margin smooth Blunt that opens in maturity, smooth radially fibrillose, colour light-beige H45:5:100 near the margin, darker in the fibrilles, and light-brown H45:100:70 and dark-brown H45:100:30 in the centre. Context 1-4 mm, colour white H0:0:100. Lamellae free, unequal with short gills in between (less than half the size of the Lamellae), subdistant, 3-7 mm height, subventricose, colour dusty-pink/salmon H15:30:100, margin smooth. Stem 71-105 mm length and 6-10 mm Ø near the Lamellae and 25-35 mm at the base, central, bolbous, fibrous, smooth with longitudinal fibres, colour white H0:0:100 with light-brown H45:100:70 fibres. Sacate volva colour light-beige H45:5:100, sometimes covering 2 stems. Odour of not-fresh seafood. Flavour not tested. Bioluminescense not observed. Habit gregarious, in groups of 2 or 3, on a fallen and burnt Ocá (*Ceiba pentandra*) tree trunk.
(Colours described with "HSV Colour Plates For Mycology" by David Malloch)

Microscopic description:
Spore print colour: dusty-pink/salmon
$\bar{X}$ Spore measurements: 7,4 µm length x 5,6 µm width

Figure 65 – Information collected on a sample identified as *Volvariella esculenta*

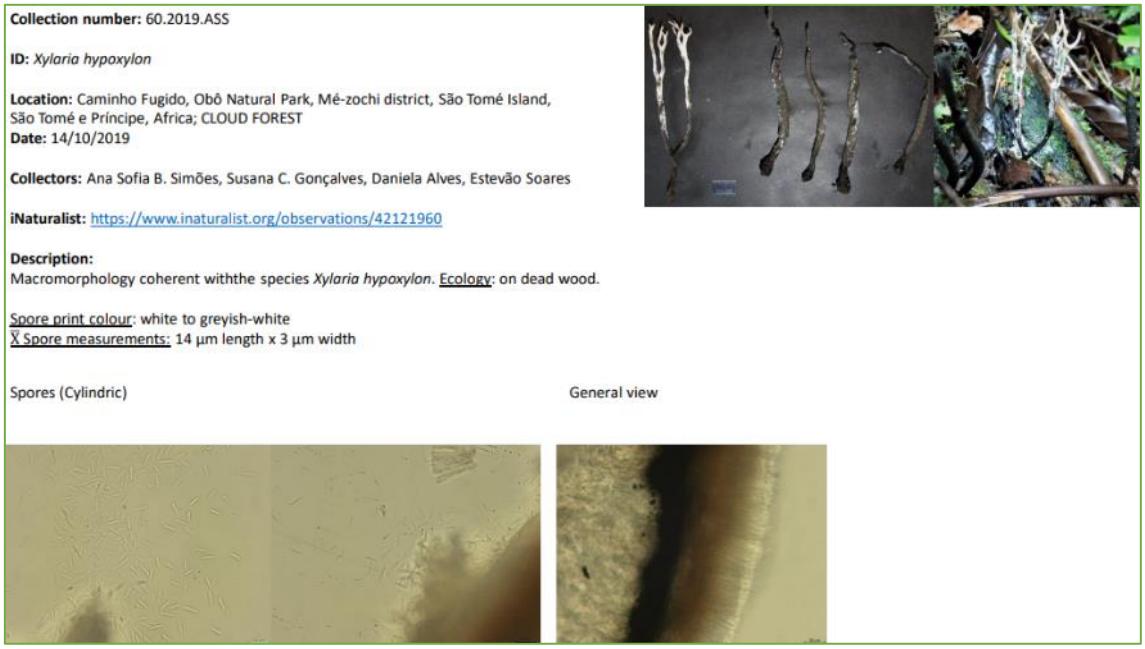


Figure 66 – Information collected on a sample identified as *Xylaria hypoxylon*

Figure 67 – Information collected on a sample identified as *Xylaria telfairii*

Some of the micromorphological characteristics that were important to be observed were basidia, cystidia, spores, ornate cells, trama and clamp connections. For example, basidia were very important to confirm the identification of *Tremella fuciformis*, as the top view of these structures is very distinctive. On the other hand, the ornate cells of *Favolaschia* sp. were not enough to reach a species identification but were definitively enough to confirm the genus. The presence or absence of clamp connections was important in all of the observations as it is a highly distinguishable characteristic, which allows mainly to differentiate between macromorphologically similar genera.

All identified species were saprobes except *Cantharellus rufopunctatus*, which is an ectomycorrhizal species (Ndong *et al*., 2019). This is expected because most tropical African trees develop arbuscular mycorrhizas instead of ectomycorrhizal associations (those that

produce mushrooms). This pattern is very common throughout the African continent (Bâ et al., 2012), especially for West Africa (Piepenbring *et al*., 2020).

3.3. Evaluation of Edible and Medicinal potentials

The consumption of mushrooms in São Tomé Island is quite limited, and only three local names are known for the species consumed by the communities. Establishing a correspondence between the local name and the scientific name wasn't an easy task, but it was possible to conclude that:

- *Utu* (in Forro, local dialect, means "mushroom") and *Utu-sandjá* (in Forro means "sardine-mushroom") are mushrooms of the same genus (*Volvariella* sp.) which are used as edible mushrooms; we could not ascertain if the two common names correspond to one or two separate species.
- *Cloçon-son* (in Forro means "Floor's-heart") has full correspondence with species *Pleurotus tuber-regium*; it is being used exclusively for its medicinal properties, which indicates unawareness of its good edibility.

West African ethnomycology has been described with basis on folk knowledge, with many comprehensive studies published (Osarenkhoe *et al.*, 2014; Ndong *et al*., 2019; Thomas *et al*., 2014; Ebika *et al*., 2018; Akpaja *et al*., 2005; Yorou, 2002). The interest in wild edible mushrooms is still mainly connected with collecting them for food in their native habitats. However, as the worldwide trend for cultivating mushrooms grows, the niche for cultivating mushrooms in Africa grows as well. The importance of works on wild edible mushrooms increases with the emergence of this niche, as the strains used for cultivation should be obtained from autochthonous mushrooms to avoid biological invasions, especially in islands (Schwartz *et al*., 2006).

In this study, only the mushrooms collected in the CMFA's of the target communities of the project were evaluated for their edibility and medicinal potentials. This is justified by the fact that the main objective of the *Tesouros d'Obô* project was to work with local communities to improve their livelihood. Working with mushrooms from places to which the communities don't have access to or implicate travelling hinders its sustainability purpose.

3.3.1. Edible species found in this study

From the 28 species identified for São Tomé Island, five are considered edible. Only one was already consumed by the population, the species *Volvariella esculenta*, locally known as "Utu". This was the only collected mushroom that the communities were able to identify (namely Dona Alexandra Mesquita and Nelito, from the community of Plancas I). All the field work in this study was done accompanied by members of the community, therefore there was plenty of opportunity for another species to be recognized by them. A curious trend in those field trips was that most mushrooms we collected were referred to as flowers at first.

A more detailed evaluation of the edible potential of the eight species is reported below. The edible aspect of mushrooms is very important to low-income communities as mushrooms are a source of high-quality protein at a low-cost (Oyetayo, 2011), becoming a more affordable alternative to animal protein.

- *Auricularia cornea*

  - Report for edibility: Osarenkhoe *et al*., 2014; Thongklang *et al*., 2020
  - *A. cornea* is an edible mushroom similar in texture, taste and colour to the widely consumed and cultivated *A. auricula-judae*. It has been cultivated in Thailand and has a cultivation protocol established (Thongklang *et al*., 2020).

- *Cantharellus rufopunctatus*

  - Report for edibility: Milenge Kamalebo *et al*., 2020
  - *C. rufopunctatus* is a yellow and sweet mushroom, widely consumed in other West African countries and other mainland African countries. This mushroom is very easy to spot due to its colour. The texture and taste are good factors for commercialization.

- *Letinus squarrosulus*

  - Report for edibility: Osarenkhoe *et al*., 2014; Abdullah et al., 2011
  - *L. squarrosulus* is very appreciated by its taste and meaty texture. It is a good source of vitamin B, C, and D, and minerals. It's nutritional profile has been analysed (Abdullah et al., 2011).

- *Phallus indusiatus*

  - Report for edibility: Osarenkhoe *et al*., 2014; Habtemariam, 2019
  - *P. indusiatus* is a controversial edible mushroom, most known for allegedly causing female orgasms just from smelling it. The truth is that the mushroom is only edible in the egg stage and the foal and putrid smell it releases when mature will keep it away from any mycophile's plate.

- *Pleurotus tuber-regium*

  - Report for edibility: Osarenkhoe *et al*., 2014; Raman *et al*., 2021
  - *P. tuber-regium* is a widely consumed and commercialized mushroom in mainland Africa. The interest in this species is with its sclerotium, commonly used in folk medicine. All parts of this mushroom are edible, making it a good candidate for domestication.

- *Volvariella esculenta*

  - Report for edibility: Osarenkhoe *et al*., 2014; Fasidi, 1996
  - *V. esculenta* is a common edible mushroom that is mainly consumed due to its taste, reportedly similar to chicken or fish. This species is very closely related to the worldwide consumed *V. volvacea.*

3.3.2. Medicinal species

Folk medicine in general uses mushrooms to treat a multitude of symptoms and diseases, some even being considered magical. Understandably, the complexity of bioactive compounds that mushrooms produce give them a great medicinal potential, and in recent years many traditional medicine claims have been proven true. Not all mushrooms that produce those compounds can be considered medicinal because sometimes the amount they produce is so small that it will not be enough to have an effect.

Three species with medicinal potential were found for the island: *Coprinellus micaceus*, *Pleurotus tuber-regium*, and *Tremella fuciformis*.

- *Coprinellus micaceus*

  - References: Zahid *et al*., 2006
  - Compounds: Micaceol (1), (Z,Z)-4-oxo-2,5-hetpadienedioic acid (2)
  - Effects/Actions: Anti-bacterial activity (1), Glutathione S-transferase inhibition (2)
  - This species only presents this anti-bacterial activity and glutathione S-transferase inhibition on methanol extracts. This means that the consumption of the mushroom itself should not be enough to see any visible effects. There was no record of folk medicine use of this mushroom.

- *Pleurotus tuber-regium*

  - References: Osarenkhoe et al., 2014; Okolo et al., 2016
  - Compounds: -
  - Effects/Actions: Protective effects on carbon-tetrachloride induced testicular injury, antitumor, antihypercholesterolemic, antihypertensive, antiobesity, hepatic-protective, antimicrobial, antioxidant, and prebiotic activities
  - This species is widely used in West Africa as medicine for a multitude of symptoms (Osarenkhoe et al., 2014). In São Tomé e Príncipe, it is used to treat stomach aches and ulcers by drinking the powdered sclerotium suspended in water (reported by

the folk therapists in Caixão Grande). It is reported by the population that it works very fast and efficiently.

- *Tremella fuciformis*

  - References: Shahrajabian et al., 2020
  - Compounds: 9,19-Cyclolanost-24-en-, 3-ol, (3.beta)-, Lanosterol, Acetic acid, 7-Isopropenyl-1,4a-dimethyl-3-oxo2,3,4,4a,5,6,7,8-octahydronaphthalen-2-yl ester, 2(1H)Naphthalenone, 3,5,6,7,8,-hexahydro4,8a-dimethyl6-(1-methylethenyl)-Lupeol
  - Effects/Actions: Creates youthful skin, improved memory and learning capabilities, lowers cholesterol, neurological damage repair, anti-inflammatory, anti-tumor, anti-aging, among others.
  - This is one of the most commercialised species of medicinal mushroom in the world. The interest in this species come from its use the Chinese traditional medicine, where it is mainly used for skincare.

3.4. Evaluation of cultivation potentials

Many mushrooms are cultivated today for food and medicine. For the purpose of this dissertation, four species were selected for their cultivation potential. The factors evaluated were human use, substrate origin and complexity, cultivation and inoculation conditions, and time. From this evaluation, the following four species were selected for being the most fitted to be cultivated by the target communities of the *Tesouros d'Obô* project.

- *Auricularia cornea*

  - Protocol: Thongklang *et al*., 2020
  - Tested substrate: Rubber sawdust
  - Temperature: 25±1°C
  - Humidity: 75-85%
  - Time: 90 days
  - This is the only protocol specific for *A. cornea*. The substrate is fairly complex and does not use any agricultural waste. However, rubber sawdust is very easy to find in São Tomé Island. This protocol could be optimized to use a simpler substrate, like those used for other species of *Auricularia*. It should be taken into consideration that the overall look and the texture of this mushroom can hinder its commercialization and consumption. Other species of *Auricularia* sp. show medicinal potential, so it is fair to assume that this species may show as well.

- *Pleurotus tuber-regium*

  - Protocol: Okhuoya *et al*., 1991
  - Tested substrate: Cassava pealings, Yam pealings, Corn straw, Rice straw, Wild grass straw
  - Temperature: 25±3°C
  - Humidity: 70%
  - Time: 20 days
  - The best results came from inoculation of sclerotia pieces, which can allow the inoculation from stored sclerotia. The substrates are fairly simple and easily

accessible in São Tomé. This species presents high edibility of its carpophore and an extensively proven medicinal potential of its sclerotia. The two main structures can be used for different purposes, so this species is extremely interesting for cultivation.

- *Volvariella esculenta*

  - Protocol: Fasidi, 1996
  - Tested substrate: Rice straw, Rice bran, Unfermented Cotton waste
  - Temperature: 20-40°C
  - Humidity: enough to flush
  - This species should be easiest to cultivate and to commercialise. The similar species *V. volvacea* is cultivated worldwide on multiple substrates, the common being straw. This species should be easy to commercialise due to the taste, typical mushroom appearance, and tender texture. Some communities (Claudino Faro, Bernardo Faro, Plancas I) already consume it, making it a safe bet for cultivation. The article explores agricultural wastes as substrate that can be found in São Tomé (besides the unfermented cotton waste). The protocol could be optimized for other substrates more common in the Island.

- *Tremella fuciformis*

  - Protocol: Chen *et al*., 2001

- Tested substrate: Supplemented sawdust-bran, supplemented cotton-seed hull and bran
- Temperature: 20-27°C
- Humidity: 85-95%
- Time: 7-10 days
- Protocols for this medicinal species requires co-culture with another species, *Hypoxylon archeri*. In nature, these species grow together since *T. fuciformis* almost has no capability to degrade lignin or celullose. This appears as limiting factor to the cultivation of this species. Regarding commercialization, the gelatinous texture and almost clear colour are limiting factors in a country that barely consumes "typical" mushrooms.

4. Future Perspectives

Santomean mycology is still a growing subject, with a lot of work done so far, but not nearly enough to cover the true fungal diversity of the island. The main gap in knowledge is on the edibility and medicinal potential of the already reported species. This work tried to push towards having that conversation started. We already known around 300 species for the island, and we know that some of them can be safely used by the local communities for food and medicine. There are many more unexplored applications that will for sure be explored in the future.

The Covid-19 pandemic severely affected this work because we were not able to have access to the laboratory for a long time. This caused one of the main tasks for this dissertation to be left behind, which was the molecular analysis. However, this can be done any time in the future, as the samples have been preserved and are currently stored in both HSTP and COI. Molecular analysis (DNA barcoding) of the samples will allow to confirm our identifications, identify the remaining samples and maybe even reveal new species to science. Another interesting future perspective would be to perform molecular analysis on the historical collections (collected by Möller *et al*. and Coutinho). This would be very important to decipher which identifications are correct, which are not and if we still can find new species to science in those samples, more than 100 years later. This would not only be very important for the knowledge of local funga but also to test the limits of the technology.

Another very interesting future perspective is the domestication and cultivation of Santomean mushrooms. The project *Tesouros d'Obô* intends to start a small production unit in the community of Saudade and this may only be the first of many in the island. The introduction of a fungal alternative to animal protein in the internal market of the island is going to be revolutionary. It is going to provide this low-income country a cheaper and high-quality protein source with a low impact in the environment (provided we use local inoculum). We want science to assist in improving the livelihoods of local communities. Having cultivated autochthonous mushrooms in the local markets would be a very important step towards that.

Figure 68 – Examples of Santomean mushrooms

5. Bibliography

Abdullah, N., Mhd Omar, N. A., Kuppusamy, U. R., Abdulla, M. A., & Sabaratnam, V. (2011). Nutritional composition, antioxidant activities, and antiulcer potential of lentinus squarrosulus (Mont.) mycelia extract. *Evidence-Based Complementary and Alternative Medicine*, *2011*. doi: 10.1155/2011/539356

Akpaja, E. O., Okhuoya, J. A., & Ehwerheferere, B. A. (2005). Ethnomycology and Indigenous Uses of Mushrooms Among the Bini-Speaking People of Nigeria: A Case Study of Aihuobabekun Community Near Benin City, Nigeria. *International Journal of Medicinal Mushrooms*, *7*(3), 373–374. doi: 10.1615/intjmedmushrooms.v7.i3.270

Antonelli, A., Smith, R. J., Fry, C., Simmonds, M. S. J., Kersey, P. J., Pritchard, H. W., Abbo, M. S., Acedo, C., Adams, J., & Ainsworth, A. M. (2020). *State of the World ' s Plants and Fungi*. *September*.

Bâ, A. M., Duponnois, R., Moyersoen, B., & Diédhiou, A. G. (2012). Ectomycorrhizal symbiosis of tropical African trees. *Mycorrhiza*, *22*(1), 1–29. doi: 10.1007/s00572-011-0415-x

Bresadola, J. (1891). Contributions à la Flore Mycologique de l'Ile de St. Thomé. *Revue Mycologique*, 65–69.

Bresadola, M. G., & Roumeguère, C. (1889). Nouvelles contributions à la Flore mycologique des Iles Saint-Thomé et du Prince. *Boletim Da Sociedade Broteriana*, *VII*, 159–177.

Bresadola, M. G., & Roumeguère, C. (1890). Nouvelles contributions á lá Flore mycologique des Iles Saint-Thomé et des Princes. *Revue Mycologique*, 25–39.

Carvalho, A. de C., D'Oliveira, J. A., Cruz, G. M. de C. V., Jesus, L. M. de, Castro, A. C. de, Bonfim, V. M. do S., Pontes, S. V. de S., Rita, A. de S., Barros, A. R. A. de, Oliveira, F. A. de, Mandinga, M., Santiago, Y. G., Viegas, M. da G. C. D., Cruz, J. A. B. da V., Carvalho, S. P., Bandeira, M. M. do N., Diogo, O. S., & Matilde, E. (2014). *National Biodiversity Strategy and Action Plan 2015-2020*.

Carvalho, M., Palmeirim, J. M., Rego, F. C., Sole, N., Santana, A., & Fa, J. E. (2015). What motivates hunters to target exotic or endemic species on the island of São Tomé, Gulf of Guinea? *Oryx*, *49*(2), 278–286. doi: 10.1017/S0030605313000550

Chen, A. W., & Huang, N. L. (2001). Production of the Medicinal Mushroom Tremella fuciformis Berk. by Mixed-Culture Cultivation on Synthetic Logs. *International Journal of Medicinal Mushrooms*, *3*(2–3), 1. doi: 10.1615/intjmedmushr.v3.i2-3.470

CIA. (2021). *The World Factbook - Sao Tome and Principe*. Retrieved from https://www.cia.gov/the-world-factbook/countries/sao-tome-and-principe/#introduction

Cooper, A. C., Desjardin, D. E., & Perry, B. A. (2018). The genus mycena (Basidiomycota, agaricales, mycenaceae) and allied genera from republic of São Tomé and Príncipe, West Africa. *Phytotaxa*, *383*(1), 1–47. doi: 10.11646/PHYTOTAXA.383.1.1

Coutinho, A. X. P. (1921). Florae Mycologicae Insulae St . Thomae. *Anais Do Instituto de Agronomia*, 1–26.

Decock, C. (2011). Studies in Perenniporia s.l. (Polyporaceae): African taxa VII Truncospora oboensis sp. nov., an undescribed species from high elevation □ cloud forest of São Tome. *Cryptogamie, Mycologie*, *32*(4), 383–390. doi: 10.7872/crym.v32.iss4.2011.383

Decock, C. (2013). Coltricia oboensis sp. nov. from the High Elevation Cloud Forest of São Tomé. *Cryptogamie, Mycologie*, *34*(2), 175–181. doi: 10.7872/crym.v34.iss2.2013.175

Degreef, J., Amalfi, M., Decock, C., & Demoulin, V. (2013). Two rare Phallales recorded from São Tomé. *Cryptogamie, Mycologie*, *34*(1), 3–13. doi: 10.782/crym.v34.issl.2013.3

Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. *Mycosphere*, *7*(3), 359–391. doi: 10.5943/mycosphere/7/3/8

Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. *Mycosphere*, *8*(9), 1317–1391. doi: 10.5943/mycosphere/8/9/5

Desjardin, D. E., Perry, B. A., Shay, J. E., Newman, D. S., & Randrianjohany, E. (2017). The type species of Tetrapyrgos and Campanella (Basidiomycota, Agaricales) are redescribed and epitypified. *Mycosphere*, *8*(8), 977–985. doi: 10.5943/mycosphere/8/8/1

Desjardin, Dennis E., & Perry, B. A. (2009). A new species of Phallus from São Tomé, Africa. *Mycologia*, *101*(4), 545–547. doi: 10.3852/08-166

Desjardin, Dennis E., & Perry, B. A. (2015a). A new species of Scytinopogon from the island of Príncipe, Republic of São Tomé and Príncipe, West Africa. *Mycosphere*, *6*(4), 433–440. doi: 10.5943/mycosphere/6/4/5

Desjardin, Dennis E., & Perry, B. A. (2015b). Clavarioid fungi and gasteromycetes from Republic of São Tomé and Príncipe, West Africa. *Mycosphere*, *6*(5), 515–531. doi: 10.5943/mycosphere/6/5/2

Desjardin, Dennis E., & Perry, B. A. (2018). The genus Pluteus (Basidiomycota, Agaricales, Pluteaceae) from Republic of São Tomé and Príncipe, West Africa. *Mycosphere*, *9*(3), 598–617. doi: 10.5943/mycosphere/9/3/10

Ebika, S. T. N., Codjia, J. E. I., Yorou, N. S., & Attibayeba, A. (2018). Les champignons sauvages comestibles et connaissances endogènes des peuples autochtones Mbènzèlè et Ngombe de la République du Congo. *Journal of Applied Biosciences*, *126*(1), 12675. doi: 10.4314/jab.v126i1.5

Exell, A. W. (1944). *Catalogue vascular plants S. Tomé (with Principe and Annobon)*. British Museum (Natural History).

Fasidi, I. O. (1996). Studies on Volvariella esculenta (Mass) Singer: cultivation on agricultural wastes and proximate composition of stored mushrooms. *Food Chemistry*, *55*(2), 161–163. doi: 10.1016/0308-8146(95)00082-8

Fries, E. (1855). Novarum Symbolarum Mycologicarum Mantissa. *Nova Acta Regiae Societatis Scientiarum Upsaliensis*, *1*(3), 225–231. Retrieved from http://www.biodiversitylibrary.org/item/86067

Gonçalves, S. C., Haelewaters, D., Furci, G., & Mueller, G. M. (2021). Include all fungi in biodiversity goals. *Science*, *373*(6553), 403 LP – 403. doi: 10.1126/science.abk1312

Grace, C. L., Desjardin, D. E., Perry, B. A., & Shay, J. E. (2019). *The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa*. *414*(2), 55–104.

Habtemariam, S. (2019). The chemistry, pharmacology and therapeutic potential of the edible mushroom Dictyophora indusiata (Vent ex. Pers.) Fischer (Synn. Phallus indusiatus). *Biomedicines*, *7*(4). doi: 10.3390/biomedicines7040098

Hawksworth, D. L., & Lücking, R. (2017). Fungal Diversity Revisited: 2.2 to 3.8 Million Species. In The Fungal Kingdom (Vol. 5, Issue 4, pp. 79–95). American Society of Microbiology. doi: 10.1128/microbiolspec.funk-0052-2016

Index Fungorum - Names Record. (n.d.). Retrieved from http://www.indexfungorum.org/names/NamesRecord.asp?RecordID=332416

Jones, P. J. (1994). Biodiversity in the Gulf of Guinea: an overview. *Biodiversity and Conservation*, *3*(9), 772–784. doi: 10.1007/BF00129657

Milenge Kamalebo, H., & De Kesel, A. (2020). Wild edible ectomycorrhizal fungi: An

underutilized food resource from the rainforests of Tshopo province (Democratic Republic of the Congo). *Journal of Ethnobiology and Ethnomedicine*, *16*(1), 1–13. doi: 10.1186/s13002-020-0357-5

Ndong, H. E., Degreef, J., & Kesel, A. De. (2019). *Champignons comestibles des forêts denses d ' Afrique centrale Taxonomie et identi fi cation Hugues Eyi Ndong*. *February 2020*.

Okhuoya, J. A., & Okogbo, F. O. (1991). Cultivation of Pleurotus tuber-regium (Fr) Sing on various farm wastes. *Proceedings of the Oklahoma Academy of Science*, *71*, 1–3.

Okolo, K. O., Siminialayi, I. M., & Orisakwe, O. E. (2016). Protective effects of Pleurotus tuber-regium on carbon- tetrachloride induced testicular injury in sprague dawley rats. *Frontiers in Pharmacology*, *7*(DEC), 1–6. doi: 10.3389/fphar.2016.00480

Osarenkhoe, O. O., John, O. A., & Theophilus, D. A. (2014). Ethnomycological Conspectus of West African Mushrooms: An Awareness Document. *Advances in Microbiology*, *04*(01), 39–54. doi: 10.4236/aim.2014.41008

Oyetayo, O. V. (2011). Medicinal uses of mushrooms in Nigeria: Towards full and sustainable exploitation. *African Journal of Traditional, Complementary and Alternative Medicines*, *8*(3), 267–274. doi: 10.4314/ajtcam.v8i3.65289

Perpétuo, N. C., Gonçalves, M. T., Sousa, J. P. de, & Gouveia, A. C. (2012). O contributo de Júlio Henriques para o conhecimento da diversidade vegetal de São Tomé e Príncipe. *Actas Do Colóquio Internacional São Tomé e Príncipe Numa Perspectiva Interdisciplinar, Diacrónica e Sincrónica*, 611–631.

Piepenbring, M., Maciá-Vicente, J. G., Codjia, J. E. I., Glatthorn, C., Kirk, P., Meswaet, Y., Minter, D., Olou, B. A., Reschke, K., Schmidt, M., & Yorou, N. S. (2020). Mapping mycological ignorance - Checklists and diversity patterns of fungi known for West Africa. *IMA Fungus*, *11*(1). doi: 10.1186/s43008-020-00034-y

Raman, J., Jang, K. Y., Oh, Y. L., Oh, M., Im, J. H., Lakshmanan, H., & Sabaratnam, V. (2021). Cultivation and Nutritional Value of Prominent Pleurotus Spp.: An Overview. *Mycobiology*, *49*(1), 1–14. doi: 10.1080/12298093.2020.1835142

S, Z., CC, U., A, A., MO, E., EP, S., & P, H. (2006). New bioactive natural products from Coprinus micaceus. *Natural Product Research*, *20*(14), 1283–1289. doi: 10.1080/14786410601101829

Saccardo, P. A., & Berlese, N. A. (1889). Mycetes aliquot Guineensis. *Revue Mycologique*, 201–205.

Schwartz, M. W., Hoeksema, J. D., Gehring, C. A., Johnson, N. C., Klironomos, J. N., Abbott, L. K., & Pringle, A. (2006). The promise and the potential consequences of the global transport of mycorrhizal fungal inoculum. *Ecology Letters*, *9*(5), 501–515. doi: 10.1111/j.1461-0248.2006.00910.x

Shahrajabian, M. H., Sun, W., Shen, H., & Cheng, Q. (2020). Chemical compounds and health benefits of Tremella, a valued mushroom as both cuisine and medicine in ancient China and modern era. *Amazonian Journal of Plant Research*, *4*(3), 692–697. doi: 10.26545/ajpr.2020.b00077x

Soulemane Yorou, N. (2002). *Guide des champignons comestibles du Benin* (Issue February 2002). Retrieved from https://www.researchgate.net/publication/328043576

The Global Fungal Red List Initiative. (2020). *The Global Fungal Red List Initiative*. Retrieved from http://iucn.ekoo.se/en/iucn/welcome

Thomas, D., Guidas Métodé, A., & Ousmane N, C. (2014). Bulletin de la Recherche Agronomique gronomique du Bénin (BRAB) - Numéro spécial Economie et Institut National des Recherches Agricoles du Bénin (INRAB) Sommaire Informations générales. *Bulletin de Recherche Agronomique Du Bénin(BRAB)*, *229*, 52–63.

Thongklang, N., Keokanngeun, L., Taliam, W., & Hyde, K. D. (2020). Cultivation of a wild strain of Auricularia cornea from Thailand. *Current Research in Environmental and Applied Mycology*, *10*(1), 120–130. doi: 10.5943/cream/10/1/13

Větrovský, T., Kohout, P., Kopecký, M., Machac, A., Man, M., Bahnmann, B. D., Brabcová, V., Choi, J., Meszárošová, L., Human, Z. R., Lepinay, C., Lladó, S., López-Mondéjar, R., Martinović, T., Mašínová, T., Morais, D., Navrátilová, D., Odriozola, I., Štursová, M., … Baldrian, P. (2019). A meta-analysis of global fungal distribution reveals climate-driven patterns. *Nature Communications*, *10*(1), 1–9. doi: 10.1038/s41467-019-13164-8

Watkinson, S. C., Boddy, L., & Money, N. P. (2015). The Fungi: Third Edition. In The Fungi: Third Edition. doi: 10.1016/C2009-0-60941-7

Winter, G. (1886). Fungi. *Boletim Da Sociedade Broteriana*, *IV*, 185–204.

Annex I – Checklist of Mushrooms reported for São Tomé's Island

Espécie	Local	Referência completa
Clitocybula intervenosa	AFRICA, São Tomé, Parque Nacional Obo, Lagoa Amelia Trail between N00˚17.112', E06˚35.967' and N00˚16.922', E06˚36.062', 14 April 2008, D.E. Desjardin and B.A. Perry, BAP 613 (SFSU). AFRICA. São Tomé, Bom Sucesso Botanical Garden, N00˚17.317', E06˚36.746', 11 April 2008, B.A. Perry, BAP 588 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Hydropus globosporus	AFRICA. São Tomé, Macambrara radio antenna area, above 1300 meters, N00˚16.557', E06˚36.326', 25 April 2008, D.E. Desjardin and B.A. Perry, BAP 661 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Hydropus murinus	AFRICA. São Tomé, Macambrara radio antenna area, above 1300 meters, N00˚16.557', E06˚36.326', 25 April 2008, D.E. Desjardin and B.A. Perry, BAP 657 (SFSU)	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Marasmius diversus C.L. Grace, Desjardin & B.A. Perry	AFRICA. São Tomé, along main road (EN-1) on west side of island at 33 km marker, N00˚19.607', E06˚30.666', 18 April 2008, collected by B.A. Perry and D.E. Desjardin, DED 8263 (SFSU; KX953751).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius elaeocephaliformis C.L. Grace, Desjardin & B.A. Perry	AFRICA. São Tomé, Macambrara, radio antenna area, 1300 m elev., N00˚16.557', E06˚36.326', 11 April 2008, collected by B.A. Perry, DED 8213 (Holotype, SFSU; KX953758).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius laranja C.L. Grace, Desjardin & B.A. Perry	AFRICA. São Tomé, Parque Nacional Obo, on trail to Lagoa Amelia, approx. 1300 m elev., between N00˚17.112', E06˚35.967 and N00˚16.922', E06˚36.062', 14 April 2008, collected by D.E. Desjardin, DED 8231 (Holotype, SFSU; KX953748).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius leptocephalus C.L. Grace, Desjardin & B.A. Perry	AFRICA. São Tomé, along main road (EN-1) on north side of island at 18.25 km marker, Shipwreck Cove, N00˚23.687', E06˚36.302', 17 April 2008, collected by D.E. Desjardin, DED 8253 (Holotype, SFSU).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius paratrichotus C.L. Grace, Desjardin & B.A. Perry	AFRICA. São Tomé, along main road (EN-1) on north side of island at 16.5 km marker, N00˚24.374', E06˚37.092', 17 April 2008, collected by D.E. Desjardin, DED 8248 (SFSU; KX953749).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius segregatus C.L. Grace, Desjardin & B.A. Perry	AFRICA. São Tomé, along main road (EN-1) on north side of island at 18.25 km marker, Shipwreck Cove, N00˚23.687', E06˚36.302', 17 April 2008, collected by D.E. Desjardin, DED 8255 (SFSU) and DED 8256 (Holotype, SFSU; KX953761).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Mycena antennae	AFRICA. São Tomé, Macambrara radio antenna area, elevation 1300 m, N00˚16.557', E06˚36.326', 25 April 2008, D.E. Desjardin and B.A. Perry, BAP 660 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena brunneoviolacea	AFRICA. São Tomé, Macambrara radio antenna area, elevation 1300 m, N00˚16.557', E06˚36.326', 11 April 2008, D.E. Desjardin and B.A. Perry, BAP 594 (SFSU). AFRICA. São Tomé, Macambrara radio antenna area, elevation 1300 m, N00˚16.557', E06˚36.326', 25 April 2008, D.E. Desjardin and B.A. Perry, BAP 656 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena longinqua	AFRICA. Príncipe, Dois Irmẽos area around 100 meters, N01˚34.89', E07˚25.548', 23 April 2008, D.E. Desjardin and B.A. Perry, BAP 648 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.

Mycena oboensis	AFRICA. São Tomé, Parque Nacional Obo, Lagoa Amelia Trail, N00˚16.922', E06˚36.062', 25 April 2008, D.E. Desjardin and B.A. Perry, BAP 669 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena phaeonox	AFRICA. São Tomé, Parque Nacional Obo, Lagoa Amelia Trail N00˚16.922', E06˚36.062', 14 April 2008, D.E. Desjardin and B.A. Perry, BAP 615 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena solis	AFRICA. São Tomé, Macambrara radio antenna area, elevation 1300 m, N00˚16.557', E06˚36.326', 11 April 2008, D.E. Desjardin and B.A. Perry, BAP 592 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Polyporus anomalus, P. Cout	Ad truncos prope terram vel ad radices Pentadesmae butyraceae: Água- - lzé, n. 49.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Agaricus (Collybia?) diffractus, P. Cout.	Ad truncos siccos Ficus sp.: Água-lzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Agaricus (Mycena) rufescens, P. Cout.	Ad truncos siccos: Água-lzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Agaricus (Pleurotus) subflabellatus, P. Cout.	Ad truncos siccos: Água-lzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Psalliota (Eupsalliota) sylvatica (Schaeff.), Fr.	Ad torram: Agua-lzê, n. 1.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Agaricus macromastes	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Agaricus papularis	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Agaricus (Galera) macromastes	In insula St. Thomae.	Fries, Elias, Nova acta Regiae Societatis Scientiarum Upsaliensis, ser. 3 v. 1 (1855), pág. 225-231
? *Trametes sepium* (Rav.), Berk.	Ad truncos Theobromatis Cacao: Água-lzé, n. 29.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Arrhenia cystidiata	AFRICA. São Tomé, along main road (EN1) on northside of island, westof Ria Luisa at 33 km marker, N00˚19.606', E06˚30.667'	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Coryne sarcoides (Jacq.) Tul	Hab. Sur les souches, S. Thomé (Leg. Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Agaricus (Naucoria) papularis	In insula St. Thomae.	Fries, Elias, Nova acta Regiae Societatis Scientiarum Upsaliensis, ser. 3 v. 1 (1855), pág. 225-231
Hirneola auricula-judae (Linn.) Berk.	Hab. Sur les branches «Pico de S. Thomé, altit. 1950 m » (Leg. Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Auricularia auricula-judae (Fr.) Schroet.	S. TOMÉ. Between Vanhulst (Macambrará) and S. Nicolau, c. 1050 m., in secondary woodland; on the steep path from Vanhulst to Jamar, c. 830 m., on dead tree-trunks, pale chocolate-brown or almost black	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Auricularia auricula-judae (L.), Schroet	Ad truncos: Água-lzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Daldinia concentrica (Bolt.) Ces	Hab. Sur les souches, S. Thomé (Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44

Nolanea papillata Bres.	Hab. A terre «Pico de S. Thomé» Sept. 1885 (Leg. Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Cantharellus buccinalis Mont.	Habitat ad cortices in Ins. St. Thomae. Leg. Quintas (Herb. Winter in R. Museo Berol).	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Auricularia fusco-succinea Mont.	Ad truncos: Água-lzè.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Cantharellus buccinalis Mont.	Habitat ad cortices in Ins. St. Thomae. Leg. Quintas (Herb. Winter in R. Museo Berol).	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Auricularia polytricha (Mont.), Sacc.	Ad truncos: Água-lzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Clathrus parvulus	Habitat ad truncos cariosos putridos in Ins. St. Thomae. Leg. Quintas, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Blumenavia angolensis	São Tomé, Obô National Park, track from Botanic Garden of Bom Sucesso to Lagoa Amelia, N 0˚17′.315 E 6˚36′.745, approx. 1200 m alt., on aerial litter in a Ficus tree, 12 Apr. 2011, Degreef 772.	Degreef, J., Amalfi, M., Decock, C., & Demoulin, V. (2013). Two rare Phallales recorded from São Tomé. Cryptogamie, Mycologie, 34(1), 3-14.
Blumenavia angolensis	São Tomé,along the road between São Luis and Chamico, N0̊ 18'23.6", E6̊ 36'24.5	Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Callistosporium elegans	AFRICA. São Tomé, Parque Nacional Obo, trail to Lagoa Amelia, betweenN0̊ 16.922', E0̊6̊ 36.062' andN0̊0̊ 17.112', E0̊6̊ 35.957', 14 April 2008, coll. by D.E. Desjardin andB.A. Perry, BAP 617 (Holotype,MF100991, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Pleurocollybia imbricata	AFRICA.São Tomé, Parque Nacional Obo, on trail to Lagoa Amelia,between N0̊0̊ 17.112', E0̊6̊ 35.967' and N0̊0̊ 16.922', E0̊6̊ 36.062', 14 April 2008, coll.by D. E.Desjardin, DED 8232 (MF100955,SFSU)	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Pleurocollybia praemultifolia	AFRICA. Príncipe, Parque Nacional Obo, trail to Lagoa Amelia, betweenN0̊0̊ 17.112', E0̊6̊ 35.967' and N0̊0̊ 16.922', E0̊6̊ 36.062', 14 April 2008, coll. by D.E. Desjardin, DED8238 (MF100956, SFSU)	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Clavaria henriquesii	Habitat in Ins. St. Thomae. Leg. Ad. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Campanella buettneri Henn.	São Tomé, Parque Nacional Obo, along trail from Bom Succeso to Lagoa Amelia, N0˚17.317', E6˚36.746', 28 April 2006 and 2 May 2006, coll. by D.E. Desjardin, material lost in transit.	Desjardin, D. E., Perry, B. A., Shay, J. E., Newman, D. S., & Randrianjohany, E. (2017). The type species of Tetrapyrgos and Campanella (Basidiomycota, Agaricales) are redescribed and epitypified. MYCOSPHERE, 8(8), 977-984.
Collybia collina Scop. Cam.	Habitat ad terram in Ins. St. Thomae. Leg. Moller, 1885.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Collybia collina Scop. Cam.	Habitat ad terram in Ins. St. Thomae	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Coprinus cinereus Schaeff.	Hab. In insula S. Thomé ad Nova Moka altit. 800 m.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Clathrus parvulus		Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Corticium coeruleum (Schrad.) Fr.	Habitat ad ligna in Iris. St. Thomae. Leg. Quintas, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Coltricia oboensis	Parque Natural Ôbo de São Tomé, São Tomé, at the Pico Carvalho base (Fig. 1a, approx. 00°16.191° N – 006°34.586′ E, elev. approx. 1570 masl) and around the Mesa bases (approx. 00°15.8′ N – 006°33.2′ E, elev. approx. 1750 masl.	Decock, Cony. "Coltricia oboensis sp. nov. from the high elevation cloud forest of São Tomé." Cryptogamie, Mycologie 34.2 (2013): 175-181.
Conocybe zeylanica	Africa, São Tomé island, along road to Bombain, 400 m elev.,N0̊ 16.625', E6̊ 38.942	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.

Coprinellus aureogranulatus	Africa, São Tomé island, along main road (EN-1) on north side ofisland at 18.25 km marker, Shipwreck Cove, N0° 23.687', E6° 36.302	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Corticium quintasianum	Habitat ad ligna mucida in Ins. St. Thomae. Leg. Quintas, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Cudonia circinans (Pers.) Fr.	Habitat ad acus coniferarum in Ins. St. Thomae. Leg. Quintas, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Coprinarius (Psathyrella) disseminatus (Pers.), Scliroet	Ad trancos emortuos Theobromatis Cacao caespitosus: Água-Izè.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Coprinellus disseminatus	Africa, São Tomé island, along aqueduct trail at RioContador, elev.600 m, N0° 18.784', E6° 37.151'	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Coprinopsis afronivea	Africa, São Tomé island, along main road (EN-1) on north side ofisland near 16.5 km marker,N0° 24.374', E6° 37.092'	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Coprinopsis cinerea	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Daedalea quercina (Linn.) Pers	Habitat ad ligna in Ins. St. Thomae. Leg. Ad. Moller	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polystictus occidentalis, Klotzsch	Ad truncos Cocos nuciferae: Água-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Trametes sprucei, Berk.	Ad truncos emortuos Theobromatis Cacao: Água-Izè, n. 36.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Daedalea sanguinea Klotzsch	Ad arbores, leg. Quintas.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Daldinia concentrica (Bolt.) Ces.	Ad arbores. Leg . Quintas. 1886 .	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Stereum pallidum (Fr.) Cooke	S. TOMÉ. Vanhulst (Macambrará), c. 1050-1200 m., in virgin forest, on the ground, cream-coloured	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Agaricus (Pleurotus) hemiphlebius (Berk. et Curt.)	Ad ligna sicca : Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Crepidotus kangoliformis	Africa, São Tomé island, Macambrara, radio antenna area, 1300 melev., N0° 16.557', E0° 36.326	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Favolus cucullatus Mont.	Habitat ad truncos in Ins. St. Thomae, Leg. Ad. Moller,	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Cyathus limbatus	Africa, São Tomé island, Parque Nacional Obo, trail to Lagoa Amelia,between N0° 17.112', E6° 35.967' and N0° 16.922', E6° 36.06	Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Cyathus striatus Pers.	S. TOMÉ. Vanhulst (Macambrará), c. 1200 m., in Plantation	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Cyptotrama asprata	AFRICA. São Tomé,Macambrara, radio antenna area, N00° 16.557', E06° 36.326', elev. 1300 m, 11 April 2008, coll. by B.A.Perry, DED 8204 (MF100958, SFSU); along road to Bombain, N00° 16.615', E06° 38.942', elev. 400 m,26 April 2008, coll. by D.E. Desjardin, DED 8336 (MF100959, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Favolus jacobaeus	Hab. Ad truncos S. Thomé (Afr. Occid.)	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205

Daedalea newtonii, Bres. et Roumeg	Ad truncos Celtidis Soyauxii: Quimpo; ad paios siccos: Francisco Mantero.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Favolus brasiliensis Fr.	Hab. Sur les souches d'arbres oPico de S. Thomé» (Leg. Moller)	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Favolus multiplex Lev.	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Daldinia concentrica (Bolt.), Ces	Ad ligna sicca: Água-lzè et Quimpo; ad Ficum sp.: Água-lzè, n. 39.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Xylaria nigripes (Klotzsch) Cooke	Hab. Sur les souches S. Thomé (Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Deconica overeemii	Africa, São Tomé island, Macambrara radio antenna area, Nº 16.557',E6º 36.326', elev. 1300m	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Deconica protea	Africa, São Tomé island, Macambrara radio antenna area, Nº 16.557',E6º 36.326', elev. 1300m	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Trametes sanguinea (Klotzsck) ou *Daedalea sanguinea*, Kl	Ad truncos siccos: Água-Izé, nn. 27, 29, 30, 43; ad truncos siccos Pseudospondiae microcarpae: Água-Izé, n. 18; ad truncos Palmae et Theobromatis Cacao: Francisco Mantero; ad truncos Theobromatis Cacao: Ponte das Palmeiras; ad Chlorophoram tenuifoliam: Mato Cana; ad ligna vetusta et ad truncos Theobromatis Cacao: Castelo; ad truncos Urophylli insularĺ8: Quimpo, n. 67; ad truncos Theobromatis Cacao: Quimpo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Favolus platyporus Berk.	Habitat ad ligna in Ins. St. Thomae. Leg. Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Hyporhodius (Nolanea) mammosus (L.), Schroet. ex P. Henn	Ad Francisco Mantero.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Craterellus crispus (Sow.) Fr	Hab. A terre «Pico de S. Thomé» Sept. 1885 (Leg. Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Xylaria involuta (Klotzsch) Cooke	Hab. Sur les souches S. Thomé (Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Favolus purpurascens Berk. et Curt	Nova Moka (800 m). 6.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Fomes igniarius (Linn.) Fr.	Habitat ad truncos in Ins. St. Thomae «Angolares». Leg. Newton, 1888.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Fomes pectinatus Klotzsch	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas, 1886 C. «Bom Successo» 1200 m altit. Legit. Ad. Moller, 1885.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Fomes senex N. et Mont.	Habitat ad truncos iu Ins. St. Thomae. Leg. Moller et Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Favolus multiplex, Lév.	Ad truncos Ficus sp.: Quimpo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Favolus philippinensis, Berk.	Ad ligna sicca: Água-lzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Xylaria polymorpha (Pers.) Grev	Hab. Sur les souches; S. Thomé «Angolares» (Leg. Newton).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Xylaria scruposa (Fr.) Berk	Hab. Sur les souches S. Thomé (Moller).	Bresadola, G., Boletim da Sociedade Broteriana, volume 9, 1891, pág. 38-44
Favolus tessellatus, Mont.	Ad ligna sicca: Água-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Ganoderma amboinense (Lam.) Fr.	Habitat ad ligna in Ins. St. Thomae, altit. 1200 m . Leg. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Ganoderma amboinense (Lam.) Fr.	Habitat ad ligna in Ins. St. Thomae, altit. 1200 m . Leg. Moller.	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Ganoderma australe Fr.	Habitat ad truncos in Ins. St. Thomae. Leg. Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177

Ganoderma fulvellum Bres.	Habitat ad ligna in Ins. St. Thomae. Leg. Quintas 1887, A. Moller, 1885.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Irpex flavus, Klotzsch	Ad truncos siccos: Água-Izé, n. 28	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Ganoderma lucidum (Leys.) Fr.	Habitat in Ins. St. Thomae «Nova Moка» altit. 900 m et «Bacia do Rio Contador» altit. 1250™. Leg. Ad. Molier, 1885.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Fomes ferrugineo-brunneus, P. Cout	Ad Palmam: Âgua-Izé, n. 34.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Ganoderma lucidum (Leys.) Fr.	Habitat in. Ins. St. Thomae "Nova Moka" altit. 900m et. "Bacia do Rio Contador" altit. 1250m. Leg. Ad. Moller, 1885	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Fomes amboinensis (Lam.), Fr.	Ad truncum Ficas sp.: Àgua-Izé, n. 33.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Poria ferruginosa (Schrad.), Fr.	Ad truncos Theobromatis Cacao: Agua-Izé, n. 51.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Ganoderma ochrolaccatum Mont.	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas, 1887	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Helotium herbarum (Pers.) Fr.	Habitat ad caules herbarum in Ins. St. Thomae «Bom Successo» altit. 1200 r a . Leg. Ad . Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Fomes senex, N.	Ad truncum Symphoniae globuliferae: Quimpo; ad truncum Elaeis guineensis: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Hexagonia cervino-plumbea Jungh.	Hab ad truncos "Bolanca" (Afr. Occid.)	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Galerina makereriensis	Africa, SãoTomé island, Macambrara, radio antenna area, 1300 melev., N0 16.557', E0 36.326	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Galerina physospora	Africa, São Tomé island, Macambrara, radio antenna area, 1300 melev., N0 16.557', E0 36.326	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Fomes applanatus (Pers.), Wallr.	Ad truncos Elaeis guineensis: Água-Izé, nn. 12, 13, 14, 15, 20; ad truncum Cocos nuciferae: Âgua-Izè, n. 60.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Hexagonia polygramma (Mont.) Fries	Roca Bemfica (300 m). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Hexagonia tenuicola (Pal.) ou *Favolus tenuiculus* Pal.	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas, 1886 ; Newton, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Hirneola fusco-succinea Mont.	Habitat in Ins. St. Thomae. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Fomes lucidus (Ley's.), Fr.	Ad truncum Ficus sp.: Agua-Izé, n. 33; ad truncos Palmae: Agua- -Izè, nn. 17, 21, 22, 40, 64; ad truncum Chlorophorae tenuifoliae: Agua- -Izé; ad truncum Palmae et ad ligna sicca: Quimpo; ad truncum Bombacis pentandri: Quimpo, n. 69; ad ligna sicca et ad Palmam: Ponte das Palmeiras; ad truncum Palmae: Castelo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Hirneola polytricha Mont.	Habitat ad truncos in Ins. St. Thomae altit. 1400 m . Leg. Ad. Moller, 1885 . «Angolares» Newton, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Hydnum rawakense Pers.	Hab. In Insula S. Thomé. Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Fomes multiplicatus, Mont.	Ad truncum Palmae: Água-Izê, n. 50; ad truncum Cocos nuciferae: Àgua-Izé, n. 59.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).

Fomes ochrolaccatus, Mont.	Ad truncum Cocos nuciferae: Agua-Izé, n. 23.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Hymenochaete damaecornis (Link) Lev	Habitat in Ins. St. Thomae. Leg. Ad. Moller. (Herb. Winter in Regio Museo Berolinensi).	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Fomes oerstedii, Fr.	Ad ligna sicca: Mato Cana; ad ligna vetusta: Castelo; ad Terculiam africanam: Ponte das Palmeiras.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Hymenochaete tenuissima Berk.	Habitat ad ligna in Ins. St. Thomae. Leg. Ad. Moller. (Herb. Winter , in R. Museo Beronin.)	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Hypoxylon cetrarioides Welw . et Curr	Ad corticem crassum arborum. Prope Pico de S. Thomé (2000 m) . 8.85 . — Santa Maria (1300 m) . 7.85 . — Bom Successo (12. K 0 m) . 8.85 .	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Geastrum fimbriatum	Africa, São Tomé island, along road to Bombain, 400 m elev.,N0̊ 16.615', E6̊ 38.942'	Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Geastrum velutinum	Africa, São Tomé island, along main road (EN-1) on north side ofisland at 16.5 km marker, N0̊ 24.374', E6̊ 37.092	Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Hypoxylon malleolus Berle, et Curt.	Ad arbores. Roc a Bemfica (300 m) . 7.85 . — Rodia (570"'). 7.85 .	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Pholiota aculeata	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Irpex flavus Klolzsch	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Pholiota aculeata, Bros. et Roumeg.	Ad truncos emortuos: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Naucoria (Flammula) dilepis (B. et Br.)	Ad trancos vel radices prope terram: Agua-Izè, n. 5: ad trancos emortuos Elaeis guineensis: Agua-Izé, n. 7 p. p	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Gymnopus billbowesii	AFRICA. São Tomé, along main road (EN-1) on north side of island at 16.5km marker, N0̊ 24.374', E0̊6 37.092', 17 April 2008, collected by D.E. Desjardin, DED 8250(Holotype,MF100989, SFSU); São Tomé, along main road (EN1)on north side of island at 18.25 kmmarker, N0̊0 23.687', E0̊6 36.302', 17 Apr. 2008, coll. by B.A. Perry and D.E. Desjardin, BAP 624(MF100990, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Gymnopus irresolutus	AFRICA. São Tomé, Macambrara, radio antenna area, 1300 m elev.,N0̊0 16.557', E0̊6 36.326', 11 April 2008, coll. by B.A. Perry and D.E. Desjardin, DED 8209(Holotype,MF100973, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Gymnopus mustachius	AFRICA. São Tomé, Parque Nacional Obo, on trail to Lagoa Amelia,between N0̊0 17.122', E06K35.967' and N0̊0 16.922', E0̊6 36.062', 28 Apr. 2008, coll. by B.A. Perry and D.E. Desjardin, BAP 670 (Holotype, MF100987, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Agaricus (Collybia) xanthopus, Fr.	Ad terram: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Gymnopus rodhallii	AFRICA. São Tomé, along mainroad EN1 at 33 km marker, N0̊0 19.606', E0̊6 30.667', 18 April 2008, coll. by D.E. Desjardin and B.A.Perry, BAP 627 (Holotype,MF100982, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Gymnopus ugandensis	AFRICA. São Tomé,Parque Nacional Obo, along trail from Bom Succesoto Lagoa Amelia,between N0̊0 17.112', E0̊6 35.967' and N0̊0 16.922', E0̊6 36.062', 14 April 2008,coll. by B.A. Perry, BAP 614 (MF100986, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Isaria arbuscula	Habitat ad corticem lignorum putrescent, in Ins. St. Thomae «San Joào dos Angolares». Leg. Newton, april. 1888 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177

Lachnocladium mollerianum	Habita t ad Ugna in Ins. St. Thomae. Leg. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Laschia auriscalpium Mont.	Habitat ad corticem arborum, interdum subcaespitosa in Ins. St. Thomae. Leg. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Lachnea hemispherica (Fuck.) Gill.	S. TOMÉ. Vanhulst (Macambrará), c. 1050-1200 m., in virgin forest, orange cup with dark hairs round the margin	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Laschia auriscalpium Mont. Sylloge	Ad ramos putridos : prope Pico de S. Thomé (1850 m). 8.85. — Prope Santa Maria (1300 m). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Laschia tremellosa Fries	Ad arbores: Bom Successo (1100 m). 5.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Hypholoma aff. *subviride*	Africa,São Tomé island, Parque Nacional Obo, trail to Lagoa Amelia,between N0̊ 17.112', E6̊ 35.967' and N0̊ 16.922', E6̊ 36.06; São Tomé island, Macambrara radio antenna area, N0̊ 16.557', E6 ̊36.326', elev. 1300m	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Inocybe hystrix	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Inocybe Hystrix, Fr.	Ad ligna sicca: Água-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Inocybe reticulata	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Inocybe reticulata, P. Cout.	Ad ligna sicca: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polystictus sideroides, Lév.	Ad ligna sicca: Cantagalo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lentinus (Cornucopioid.) flaccidus	In insula St. Thomae ad truncos	Fries, Elias, Nova acta Regiae Societatis Scientiarum Upsaliensis, ser. 3 v. 1 (1855), pág. 225-231
Lentinus cochleatus var. *occidentalis*	Ex insula St. Thomae	Fries, Elias, Nova acta Regiae Societatis Scientiarum Upsaliensis, ser. 3 v. 1 (1855), pág. 225-231
Lactocollybia variicystis	AFRICA. São Tomé, along road EN1 near Conde, N0̊ 22.802',E06̊ 39.334', 12 April 2008, coll. by B.A. Perry and D.E. Desjardin, BAP 598 (MF100971, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Lentinus descendens Fr.	Habitat in Ins. St. Thomae, altid. 1000. Leg. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Lentinus descendens Fr.	Habitat in Ins. St. Thomae, altid. 1000. Leg. Moller.	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polystictus kurzianus, Cooke	Ad truncos Chlorophorae tenuifoliae: Mato Cana	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lentinus villosus Klotzsch	Ad arbores: leg. Quintas, 1886	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Lentinus (Eulentinus) flabelliformis (Bolt.), Fr.	Ad ligna sicca: Água-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lenzites applanata Fr.	Habitat ad truncos in Ins. St. Thomae . Leg. Newton, f. a; Ad. Moller,' Leg. Lb.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Lentinus (Eulentinus) thomensis, P. Cout.	Ad truncos siccos et ad ligna; Agua-Izè; ad Palmam et ad Bombacem jpentandrum: Francisco Mantero.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).

Lenzites applanata Fr.	Habitat ad truncos in Ins. St. Thomae. Leg. Newton.	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Lenzites aspera (Klotzsch) Fries ou *Daedalea aspera* Klotzsch	Ad arbores: Bacia do rio Contador (1200 m). 8.85. —Monte Café (800 m). 8.85.—Pr. Lagôa Amelia (1350 m). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Lenzites aspera Kt. f. *platyphylla* Lev.	Habitat ad ligna in Ins. St. Thomae «Bom successo» 105O m altit. 1885. Leg. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Lenzites applanata, Fr.	Ad truncos siccos Treculiae africanae: Ponte das Palmeiras.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lenzites aspera Kt. *f. platyphylla* Lev.	Habitat ad ligna in Ins. St. Thomae "Bom Sucesso" 1050m altit. 1885	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Lenzites aspera, Klotzsch	Ad truncos Urophylli insularis: Âgua-Izé, n. 76; ad truncos Artocarpi incisi: Água-Izé, n. 54; ad truncos siccos: Francisco Mantero; adradices: Castelo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lenzites deplanata Fries ou *Daedalea deplanata* Fries	Ad arbores: Macambrarâ (1100r a). 6.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Lenzites repanda (Pers.) Fries ou *Daedalea repanda* Pers.	Ad arbores: Bacia do rio Contador (1250 m). 8.85. — Encostas do Pico de S. Thomé (1900™). 8.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Marasmius amadelphus (Bull.) Fr.	Habitat ad ramos in Ins. St. Thomae. Leg. Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Lenzites repanda (Pers.), Fr	Ad truncos siccos Cocos nuciferae: Água-Izé, n. 26; ad Artocarpum incisum caespitosa: Água-Izé, n. 77; ad truncos Theobromatis Cacao: Quimpo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lopharia lirellosa, Kalchbr.	Ad ligna sicca: Cantagalo	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Gymnopus aff. *brunneigracilis*	AFRICA. São Tomé, along road EN-1 on northside of island at 18.25 kmmarker, N00˚23.687', E06˚36.302', 17 April 2008, coll. by D.E. Desjardin and B.A. Perry, BAP 621(MF100983, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Gymnopus gibbosus	AFRICA. São Tomé, along main road (EN1) on north side of island at 16.5km marker, N00˚24.374', E06˚37.092', 17 Apr. 2008, coll. by B.A. Perry and D.E. Desjardin, BAP 620(MF100978, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Gymnopus melanopus	AFRICA. São Tomé, along main road (EN2) on south side of islandapprox. 200 meast of 38 km marker, N00˚08.500', E06˚39.650', 13 Apr. 2008, coll. by B.A. Perry,BAP 607 (MF100988, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Gymnopus aff. *polygrammus*	AFRICA. São Tomé, Macambrara, radio antenna area, N00˚16.557',E06˚36.326', elev. 1300 m, 25 April 2008, coll. by D.E. Desjardin, DED 8324 (MF100979, SFSU);road EN1 near Santa Catarina, N0˚14.458', E06˚28.278', elev. 10 m, 27 April 2008, coll. by D.E.Desjardin and B.A. Perry, BAP 668 (MF100980, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Marasmius amadelphus (Bull.) Fr.	Habitat ad ramos in Ins. St. Thomae. Leg. Newton.	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Marasmius splachnoides Fr.	Habitat ad folia decidua in Ins. St. Thomae ad «S. Joào dos Angolares». Leg. Newton. Aoùt 1888.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Marasmius amadelphus (Bull.), Fr.	Ad trancos emortuos: Água-Izè.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Marasmius splachnoides Fr.	Habitat ad folia decidua in Ins. St. Thomae ad «S. Ioas dos Angolares». Leg. Newton. Aoùt 1888.	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Mycena tintinnabulum Fr.	Habitat in Ins. St. Thomae. Leg. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Marasmius corrugatiformis Singer	AFRICA. São Tomé, Parque Nacional Obo, on trail to Lagoa Amelia, approx. 1170–1300 m elev., between N00˚17.112', E06˚35.967 and N00˚16.922', E06˚36.062', 14 April 2008, collected by B.A. Perry and D.E. Desjardin, DED 8233 (SFSU; KX953757); Macambrara, radio	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.

	antenna area, 1300 m elev., N00˚16.557', E06˚36.326', 25 April 2008, collected by D.E. Desjardin, DED 8326 (SFSU; KX953756).	
Marasmius elaeocephalus Singer	AFRICA. São Tomé, along main road (EN-1) on north side of island at 18.25 km marker, Shipwreck Cove, N00˚23.687', E06˚36.302', 17 April 2008, collected by D.E. Desjardin, DED 8254 (SFSU; KX953754); São Tomé, along main road (EN-1) on west side of island at 33 km marker, N00˚19.607', E06˚30.666', 18 April 2008, collected by D.E. Desjardin, DED 8264 (SFSU).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius grandisetulosus Singer	AFRICA. São Tomé, along main road (EN-2) on south side of island near 38 km marker, N00˚08.500', E06˚39.560', 13 April 2008, collected by D.E. Desjardin, DED 8225 (SFSU; KX953743); São Tomé, along main road (EN-1) on north side of island at 18.25 km marker, Shipwreck Cove, N00˚23.687', E06˚36.302', 17 April 2008, collected by B.A. Perry, DED 8257 (SFSU; KX953744).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius haediniformis Singer	AFRICA. São Tomé, along main road (EN-1) on north side of island near Conde, N00˚22.802', E06˚39.334', 12 April 2008, collected by B.A. Perry, DED 8216 (SFSU; KX953759); São Tomé, along main road (EN-1) on north side of island, off dirt road near Muquinqui, N00˚22.653', E06˚38.676', 12 April 2008, collected by B.A. Perry, DED 8217 (SFSU; KX953760).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius aff. *megistus* Singer	AFRICA. São Tomé, Parque Nacional Obo, on trail to Lagoa Amelia, between N00˚17.112', E06˚35.967 and N00˚16.922', E06˚36.062', 14 April 2008, collected by D. E. Desjardin, DED 8230 (SFSU; KX953750).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius nodulocystis Pegler	AFRICA. São Tomé, along main road (EN-1) on west side of island at 33 km marker, N00˚19.607', E06˚30.666', 18 April 2008, collected by B.A. Perry and D.E. Desjardin, DED 8269 (SFSU; KX953740).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius palmivorus	AFRICA. São Tomé, along main road (EN1) on north side of island, westof Ria Luisa at 33 km marker, N0˚19.606', E0˚30.667', 18 April 2008, coll. by B.A. Perry, BAP 628(MF100964, SFSU); same location, 26 April 2006, coll. by D.E. Desjardin (material lost); São Tomé,along main road (EN1) on north side of island at 18.25 km marker, N0˚23.687', E0˚36.302', 17 April2008, coll. by D.E. Desjardin and B.A. Perry, BAP 625 (MF100965, SFSU);São Tomé, along mainroad (EN2) on south side of island, N0˚12.126', E0˚42.362', 13 April 2008, coll. by D.E. Desjardin,DED 8219 (MF100966, SFSU); São Tomé, along road to Bombain, N0˚16.615', E0˚38.942', elev. 400m, 26 April 2008, coll. by D.E. Desjardin, DED 8337 (MF100967, SFSU)	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Marasmius rotalis Berkeley & Broome	AFRICA. São Tomé, Parque Nacional Obo, on trail to Lagoa Amelia, between N00˚17.112', E06˚35.967 and N00˚16.922', E06˚36.062', 14 April 2008, collected by D.E. Desjardin, DED 8246 (SFSU)	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Mycena tintinnabulum Fr.	Habitat ad terram in Ins. St. Thomae. Legit. Moller	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Naucoria fusco-olivacea	Habitat ad truncos in Ins. St. Thomae. Leg. Newton, 1887 , «S. Pedro» et 1100 m altit. A. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Marasmius subarborescens Singer	AFRICA. São Tomé, along main road (EN-1) on north side of island near Conde, N00˚22.802', E06˚39.334', 12 April 2008, collected by B.A. Perry, DED 8215 (SFSU; KX953755).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Marasmius tenuisetulosus Singer	AFRICA. São Tomé, along main road (EN-1) on west side of island at 33 km marker, N00˚19.607', E06˚30.666', 18 April 2008, collected by B.A. Perry and D.E. Desjardin, DED 8267 (SFSU).	Grace, Chris L., et al. "The genus Marasmius (Basidiomycota, Agaricales, Marasmiaceae) from Republic of São Tomé and Príncipe, West Africa." *Phytotaxa* 414.2 (2019): 55-104.
Naucoria fusco-olivacea	Habitat ad truncos in Ins. St. Thomae. Leg. Newton "S. Pedro" 1.100 m. et altit. A. Moller, 1885	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polystictus affinis (T. Nees) Cooke	S. TOMÉ. Vanhulst (Macambrará), c. 1050-1200 m., in virgin forest, on dead wood, dark brown above with cream or light brown margin, whitish bellow	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).

Panus sprucei Berk.	Habitat ad ligna in Ins. St. Thomae . Leg. Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Panus Sprucei Berk.	Habitat ad ligna in Ins. S. Thomae. Leg. Newton	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polystictus flabelliformis, Klotzsch	Ad truncos Celtidis Soyauxii et ad truncos Palmae: Francisco Mantero.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Panus troglodytes	Ad truncos insulae St. Thomae	Fries, Elias, Nova acta Regiae Societatis Scientiarum Upsaliensis, ser. 3 v. 1 (1855), pág. 225-231
Mutinus zenkeri	São Tomé, Obô National Park, N 0˚17′.643 E 6˚36′.351, 1300 m, on stump of dead tree, unidentified angiosperm, 13 Apr. 2011, Degreef 782; ibid., caminho del fugido, N 0˚17′.475 E 6˚36′.357, 1250 m, on rotten wood, 15 Apr. 2011, Degreef 837.	Degreef, J., Amalfi, M., Decock, C., & Demoulin, V. (2013). Two rare Phallales recorded from São Tomé. Cryptogamie, Mycologie, 34(1), 3-14.
Mycena alphitophora	AFRICA. São Tomé, Macambrara radio antenna area, elevation 1100 m, N00˚16.554′, E06˚36.326′, 11 April 2008, D.E. Desjardin and B.A. Perry, BAP 591(SFSU); same location, 25 April 2006, D.E. Desjardin (material lost in transit).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena aff. discobasis	AFRICA. São Tomé, Macambrara radio antenna area, N00˚16.557′, E06˚36.326′, 25 April 2008, D.E. Desjardin and B.A. Perry, BAP 658 (SFSU); same location, 11 April 2008, D.E. Desjardin, DED 8211 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena galopus	AFRICA. São Tomé, Macambrara radio antenna area, elevation 1300 m, N00˚16.557′, E06˚36.326′, 11 April 2008, D.E. Desjardin and B.A. Perry, BAP 593 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena aff. holoporphyra	AFRICA. São Tomé, Macambrara radio antenna area, elevation 1300 m, N00˚16.557′, E06˚36.326′, 25 April 2008, D.E. Desjardin, DED 8334 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Mycena lasiopus	AFRICA. Príncipe, along trail to Roça Pico Papagaio, N01˚37.182′, E07˚23.474′, 21 April 2008, on sticks in secondary, upland forest, D.E. Desjardin and B.A. Perry, BAP 635 (SFSU). São Tomé, along main road (EN2) on south side of island approx. 200 m east of 38 km marker, N00˚08.500′, E06˚39.560′, 13 April 2008, on woody debris in forest with cacao, D.E. Desjardin and B.A. Perry, BAP 603 (SFSU).	Cooper, Alexandra C., Dennis E. Desjardin, and Brian A. Perry. "The genus Mycena (Basidiomycota, Agaricales, Mycenaceae) and allied genera from Republic of São Tomé and Príncipe, West Africa." Phytotaxa 383.1 (2018): 1-47.
Agaricus (Mycena) roseus, Bull.	Ad terram: Água-Izê.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Peziza stictica Berk. et Curt.	In terra numida. Roca Saudade (700 r a). 9.85 .	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Pholiota aculeata	Habitat ad truncos putrescentes caespitosus, in Ins. St. Thomae ad Angulares. Leg. Newton, altit. 8 0 m. 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Mycetinis ignobilis	AFRICA. São Tomé, Macambrara, radio antenna area, 1300 m elev.,N00˚16.557', E06˚36.326', 11 April 2008, coll. by B.A. Perry and D.E. Desjardin, DED 8207(MF100963,SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Naucoria (Flammula) aureo-brunnea (Berk. et Curt.)	Ad truncos Elaeis guineensis: Água-Izè, n. 7 p. p.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Gymnopilus aureobrunneus	Africa, São Tomé island, along main road (EN-2) on south side ofisland, N0˚12.126', E6˚42.362	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Naucoria (Flammula) brevipes, P. Cout.	Ad truncos emortuos: Agua-Izé, n. 2; ad ligna sicca: Agua-Izé, n. 9.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).

Naucoria brevipes	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Naucoria (Flammula) chrysotricha (Berk. et Curt.)	Ad truncos siccos: Agua-Izé, n. 10.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Naucoria chrysotricha	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Pholiota aculeata	Habitat ad truncos putrescentes caespitosus, in Ins. St. Thomae ad Angulares. Leg. Newton, altit. 8 0 m. 1887 .	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Naucoria fusco-olivacea	.-.	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Polyporus (Fomes) amboinensis Fries	Ad arbores: Bacia do rio Contador (1250 m). 7.85. — Prope Lagôa Amelia (1350 m). 6.85.—Nova Moka (900 m). 5.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus (Fomes) australis Fries	Ad arbores: prope- Santa Maria (1300r a). 6.85.—Obó de Macambrarâ (1100r a). 7.85. —Pico de S. Thomé (1900-2000 m). 8.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Naucoria (Flammula?) papularis, Fr.	Ad ligna sicca: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Sphaerostilbe sp.	S. TOMÉ. Vanhulst (Macambrará), c. 1050-1200 m., in virgin forest, on bark, orange-coloured	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Polyporus (Fomes) igniarius Fries	Prope Lagôa Amelia (1400™). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Trametes ohiensis, Berk	Ad truncos Cocos nuciferae: Água-Izé; ad truncos Bombacis pentandri: Quimpo, nn. 72, 74.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus (Fomes) lucidus Fries	Ad truncos Palmarum (Cocos nuciferae et Elaeis guinensis) prope S. Thomé (10 m). 9.85	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Phaeodon thomensis, P. Cout	Ad truncos prope terram seu radices: Àgua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Phallus drewesii	Parque Nacional de Obô, trilho da Lagoa Amélia, São Tomé	Desjardin, D. E., & Perry, B. A. (2009). A new species of Phallus from São Tomé, Africa. *Mycologia*, *101*(4), 545-547.
Phallus drewesii	trail to Lagoa Amelia, Obo National Park, São Tomé	Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Phallus tenuis Fisch.	S. TOMÉ. Vanhulst (Macambrará), c. 1050-1200 m., in virgin forest, on dead wood	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Polyporus (Polystictus) caperatus Berk.	Ad arbores: Obô de Macambrarâ (1200 m). 6.85. — Quinta das Flores (600 m). 6.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus (Polystictus) flabelliformis Klotzsch	Ad arbores: Bacia do rio Contador (1250r a). 7.85.—Bom Successo (1200 m). 6.85. —Prope Chamiço (870 m). 7.85. —Santa Maria 7.85. —Prope Mongo (600r a). 9.85. —Pico de S. Thomé (2000 m). 8.85. — Pouso allo 7.85. —Prope Trindade (300 m). 9.95.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus (Polystictus) russogramme Berk	Ad arbores: Rodia (750 m). 7.85. — Obô de Macambrarâ (1250r a). 6.15. — Pr. Lagôa Amelia (1350 m). 9.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus albogilvus Berk, et Curt.	Ad arbores: Bom Successo (1500 m). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus atypus Lev.	Habitat ad truncos in Ins. St. Thomae. Leg. Newton ad «Angolares» 1887.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177

Polyporus atypus Lev.	Habitat ad truncos in Insula St. Thomae. Leg. Newton "Angolares" 1887	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polyporus auberianus Mont.	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller. In Ins. Principis leg. Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polyporus auberianus Mont.	Ad arbores: Bom Successo (1100 m). 9.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus auberianus Mont.	Habitat ad truncos in insula St. Thomae. Leg. Moller (a) Principe. Quintas (b)	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Fomes igniarius (L.), Fr.	Ad truncos: Água-Izè, n. 35.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus dictyopus Mont.	Habitat ad truncos in Ins. St. Thomae. Leg . Ad. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Phellorina delestrei (Dur. et Mont.), Fisch.	Ad terram: Agua-Izé, n. 4.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus dictyopus Mont.	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller, 1887	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Fomes pectinatus, Klotzsch	Ad truncos Ficus sp.: Quimpo; ad truncos Theobromatis Cacao: Água- -Izè; ad truncum Cuestis oblongifoliae: Mato Cana.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lentinus (Eulentinus) descendens, Fr	Ad terram: Água-Izé, n. 48.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Lentinus (Eulentinus) Tuber-regium, Fr.	Ad terram et prope truncum putrescentem Cocos nuciferae; Água-Izé; ad terram et prope truncos putrescentes: Quimpo; prope Bombacem pentandrum: Francisco Mantero.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus gilvus Schw.	Habitat ad truncos in Ins. St. Thomae «Bom successes alt. 1200™ «Pico» 2140 m «S. Alaria» 1300 m . Leg. Moller, 1885.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polyporus gilvus Schw.	Hab. Ad Truncos S. Thomé Afr. Occid. (29 et 7aaa)	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Pluteus albidus	AFRICA. São Tomé, Parque Nacional Obo, trail to Lagoa Amelia, between N00˚17.112', E06˚35.767' and N00˚16.922', E06˚36.062, 14 April 2008, coll. by B.A. Perry, BAP 612 (MG968798, SFSU); same location, 28 April 2006, coll. by D.E. Desjardin (material lost).	Desjardin, D. E., and B. A. Perry. "The genus Pluteus (Basidiomycota, Agaricales, Pluteaceae) from Republic of São Tomé and Príncipe, West Africa." *Mycosphere* 9.3 (2018): 598-617.
Pluteus albostipitatus	AFRICA. São Tomé, Macambrara radio antenna area, N00˚16.557', E06˚36.326', elev. 1300 m, 11 April 2008, coll. by D.E. Desjardin, DED 8205 (MG968801, SFSU); same location, 25 April 2006 (material lost in transit); São Tomé, along main road (EN-2) on south side of island at N00˚12.126', E06˚42.362', 13 April 2008, coll. by D.E. Desjardin, DED 8220 (MG968802, SFSU).	Desjardin, D. E., and B. A. Perry. "The genus Pluteus (Basidiomycota, Agaricales, Pluteaceae) from Republic of São Tomé and Príncipe, West Africa." *Mycosphere* 9.3 (2018): 598-617.
Pluteus chrysaegis	AFRICA. São Tomé, along main road (EN-2) on south side of island near 38 km marker, N00˚08.500', E06o 39.560', 13 April 2008, coll. by D.E. Desjardin, DED 8226 (MG968799, SFSU).	Desjardin, D. E., and B. A. Perry. "The genus Pluteus (Basidiomycota, Agaricales, Pluteaceae) from Republic of São Tomé and Príncipe, West Africa." *Mycosphere* 9.3 (2018): 598-617.
Pluteus hirtellus	AFRICA. São Tomé, Shipwreck Cove, along main road (EN-1) on north 613 side of island at 18.25 km marker, N00˚23.687', E06˚36.702', 17 April 2008, coll. by B.A. Perry and D.E. Desjardin, DED 8259 (MG968804, SFSU).	Desjardin, D. E., and B. A. Perry. "The genus Pluteus (Basidiomycota, Agaricales, Pluteaceae) from Republic of São Tomé and Príncipe, West Africa." *Mycosphere* 9.3 (2018): 598-617.
Pluteus thomensis	AFRICA. São Tomé, Macambrara radio antenna area, N00˚16.557', E06˚36.326', elev. 1300 m, 25 April 2008, coll. by B.A. Perry, DED 8333 (MG968800, SFSU); São Tomé, between Bom Sucesso at 1170 m elev. and Lagoa Amelio at 1480 m elev., near N00˚17.317', E06˚36.746', 2 May 2006 (material lost in transit).	Desjardin, D. E., and B. A. Perry. "The genus Pluteus (Basidiomycota, Agaricales, Pluteaceae) from Republic of São Tomé and Príncipe, West Africa." *Mycosphere* 9.3 (2018): 598-617.
Stereum pergameneum B. & C.	S. TOMÉ. Vanhulst (Macambrará), c. 1050-1200 m., in virgin forest, on dead tree-trunk, chestnut-brown above, paler below	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Coryne sarcoides (Jacq.) Tul	Hab. Sur les souches, St. Thomé (leg. Moller)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Hirneola auricula-judae (Linn.) Berk.	Hab. Sur les branches «Pico de S. Thomé, altit. 1950 m » (Leg. Moller).	Bresadola, G., Revue Mycologique, 1891, pág. 65-69

Polyporus gilvus Schw.	Habitat ad truncos in Ins. S. Thomae "Bom Sucesso" alt. 1200 m "Pico" 2140m "S. Maria" 1300m Leg. Moller, 1885	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polyporus gilvus var. b. *scruposus* Fr.	Habitat ad truncos in Ins. St. Thomae, altit. 1200™. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polyporus grammocephalus Berk	Ad arbores. 1886. leg. F. Quintas.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus licnoides Mont.	Habitat ad truncos Ins. St. Thomae. Leg. Quintas, 1886.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polyporus rugulosus, Lév	Ad trancos emortuos: Agua-Izé	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus licnoides Mont.	Habitat ad truncos Ins. St. Thomae. Leg. Quintas, 1886.	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polyporus rugulosus Lev.	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller et Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polystictus albido-cinereus, P. Cout.	Ad ligna sicca: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus rugulosus Lev.	Habitat ad truncos in Insula St. Thomae. Leg. Ad. Moller et Quintas	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Polyporus scruposus Fries	Ad arbores: Bacia do rio Contador (1250 m). 8.85. — Bom Successo (1150-1200 m). 7 et 9.85. — Macambrarâ (1100 m). 6.85. —Santa Maria (1300 m). 7.85. —Nova Moka (750 m). 9.85. —Encostas do Pico de S. Thomé (1800 m). 8.85. — Roca Monte Café (880 m). 6.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus scruposus Fries var. *isidioides* Berk.	Ad arbores : Bom Successo (1050-1200 m). 5 et 7.85. — Prope Lagôa Amelia (1350 m). 6.85. —Mongo (600 m). 8.86. — Trindade (300 m). 6.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Psathyrella albipes	Africa, São Tomé island, along main road (EN-1) on west side ofisland near 45 km marker, N0̊ 13.914', E6̊ 28.671	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Psathyrella cacao	Africa, São Tomé island, along main road (EN-1) on west side ofisland near 33 km marker, N0̊ 19.607', E6̊ 30.666	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Psathyrella oboensis	Africa, São Tomé island, Parque Nacional Obo, trail to Lagoa Amelia,between N0̊ 17.112', E6̊ 35.967' and N0̊ 16.922', E6̊ 36.06	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.
Daldinia concentrica (Bolt.) Ces var. *Eschscholzii* Ehremb.	Hab. Sur les souches, St. Thomé (leg. Moller)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Nolanea papillata Bres.	Hab. A terre «Pico de S. Thomé» Sept. 1885 (Leg. Moller).	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Polyporus torquescens	Hab. Ad Truncos S. Thomé Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Polyporus venezuelae Berk, et Curt	Ad arbores: Bom Successo (1150 m). 7.75.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Pterulicium xylogenum		Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Polystictus sanguineus (L.), Fr.	Ad trancos emortuos Cocos nuciferae: Agua-Izé, n. 11.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polyporus zonalis Berk.	Habitat ad truncos in Ins. St. Thomae. Leg. Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Ramaria henriquesii		Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Polyporus zonalis Berk.	Habitat ad truncos in Insula St. Thomae. Leg. Newton	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Ramaria molleriana		Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.

Ramaria polypus	Africa, São Tomé island, Parque Nacional Obo, trail to Lagoa Amelia,between N0˚17.112', E6˚35.967' and N0˚16.922', E6˚36.06	Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Polystictus affinis Nees	Hab. Ad ramos in S. Thomé Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Polystictus flabelliformis K. var. *glabriceps* ou *Polyporus flabelliformis* Winter	Habitat ad truncos in Ins. St. Thomae. Leg. Newton ad «Angolares» 1888.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Lentinus (Panus) Sprucei (Berk.) ou *Panus Sprucei*, Berk.	Ad truncos: Agua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polystictus hirsutus (Wulf.) Fr.	Habitat ad truncos in Ins. St. Thomae, a f. tenuis altit. 800 m . Leg. Moller, 188 5 ; b. crassa. Quintas, 1887 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polystictus kurzianus Cooke	Habitat ad truncos in Ins. St. Thomae, altit. 1050™. Leg. Moller	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polystictus mollerianus	Hab. In insula S. Thomé Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Polystictus pinsitus	Ex ins. St. Thomae	Fries, Elias, Nova acta Regiae Societatis Scientiarum Upsaliensis, ser. 3 v. 1 (1855), pág. 225-231
Polyporus zonalis, Berk	Ad truncos siccos: Água-Izé, nn. 41, 47; ad truncos Chlorophorae tenuifoliae: Água-Izé, n. 44; ad truncos Theobromatis Cacao: Castelo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polystictus velutinus Fr	Habitat ad ligna in Ins. St. Thomae. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polyporus auberianus Mont.	Ad truncos siccos: Água-hé; ad truncos vetustos: Quimpo.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polystictus velutinus Fries	Hab. Ad Truncos S. Thomé Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Polystictus versicolor (Linn.) Fr.	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas'.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Ripartitella brasiliensis	AFRICA. São Tomé, Macambrara, radio antenna area, N0˚16.557',E6˚36.326', elev. 1300 m	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Schizophyllum alneum (L.), Schroet.	Ad cortices truncorum emortuorum Fiem sp.: Água-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Schizophyllum commune Fr.	S. TOMÉ. Between Vanhulst (Macambrará) and S. Nicolau, c. 1050 m., in secondary woodland, on dead wood, chocolate-brown	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Polystictus xanthopus Fries	Hab. Ad ramos in Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Poria ferruginosa Schrad	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Psathyrella disseminata Pers.	Habitat ad truncos in Ins. S. Thomae. Leg. Quintas "S. Joas dos angolares" Leg. Newton, avril 1888. Quintas 1886	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Psathyrella disseminata Pers.	Habitat ad truncos in Ins. St. Thomae «S. Joào dos Angolares». Leg. Newton, avril, 1888 . Quintas, 1886	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Pterula subaquatica	Habitat ad herbas aquaticas putrescentes in Ins. St. Thomae. Leg. Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Setulipes afibulatus	AFRICA. São Tomé, Macambrara, radio antenna area, 1300 m elev.,N0˚16.557', E6˚36.326', 11 April 2008, coll. by B.A. Perry and D.E. Desjardin, DED 8208(MF100972, SFSU); same location, 25 April 2006, coll. by D.E. Desjardin (material lost).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Simocybe centunculus	Africa, São Tomé island, along main road (EN-1) on north side ofisland at 18.25 km marker, Shipwreck Cove, N0˚23.687', E6˚36.302	Desjardin, D. E., & Perry, B. A. (2016). Dark-spored species of Agaricineae from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 7(3), 359-391.

Schizophyllum commune Fr. var. *multifidum*	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas ad «Angolares» 10 m. altit. Leg. Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Schizophyllum commune Fr. var. *multifidum* Batsch	Habitat ad truncos in Ins. S. Thomae. Leg. Quintas "Angolare" 10 m. altit. Leg. Newton	Bresadola, G., Roumeguère, C., Revue Mycologique, 1890, pág. 25-39
Thelephora radicans, Berk	Ad terram: Água-Jzé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Schizophyllum commune Fries	Ad arbores: Bom Successo (1250 m) et Nova Moka (900 m). 9.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Stereum amphirhytes	Hab. In Insula S. Thomé. Afr. Occid. (Ad. F. Moller)	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Stereum bellum Kunze	Habitat in Ins. St. Thomae. Leg. Quintas, 1886 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Stereum bellum Kunze	Prop. Pico de S. Thomé (1920 m). 8.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Stereum bicolor (Pers.) Fr.	Habitat ad truncos in Ins St. Thomae. Leg. Moller. (Herb. Winter in R. Museo Berol.)	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Stereum duriusculum Berk.	Habitat ad ligna in Ins. St. Thomae (Angolares). Leg. Newton, 1887.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Stereum fasciatum (Schwein) Fries	Ad arbores: Bom Successo (I200 m). 7.85.—Nova Moka (900 m). 8.85. —Pico de S. Thomé (1850 m). 8.85. —Prope Ponte que Deus fez (Roca Saudade). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Stereum lobatum Fr.	S. TOMÉ. Between Estação Souza and the Pico, c. 1750 m., on dead wood	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Stereum lobatum, Fr.	Ad truncos Cocos nuciferae: Agua-Izê.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Stereum hirsutum (Willd.) Fr.	Habitat ad ligna in Ins. St. Thomae. Leg. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Stereum fasciatum (Schw. Car. n. 1011), Fr.	Ad truncos siccos: Francisco Mantero.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Stereum kalchbrenneri Sacc.	Hab. In Insula S. Thomé. Afr. Occid.	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205
Stereum lobatum (Kunze) Fr.	Habitat ad truncos in Ins. St. Thomae «Bacia do rio Contador» altit. 1200 m . Leg. Ad. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Stereum lobatum (Kunze) Fries	Ad arbores: Bacia do rio Contador (1200 m). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Stereum obliquum Mont.	Habita t ad ligna in Ins. St. Thomae. Leg. Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Trametes cubensis (Mont.), Bros	Ad truncos emortuos: Âgua-Izé, n. 38; ad truncos siccos Pseudospondiae microcarpae: Água-Izè, n. 18.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Stereum purpureum Pers.	Habitat ad ligna in Ins. St. Thomae. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Trametes gibbosa (Pers.), Fr	Ad truncos Theobromatis Cacao: Âgua-Izé.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Polystictus hirsutus (Schrad.), Fr.	Ad truncos siccos Pseudospondiae microcarpae: Água-Izé, nn. 18 et 31.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Stereum spadiceum Fr. Var. *venosum* Quél	Habitat ad ligna in Ins. St. Thomae. Leg. Ad. Moller. (Herb. Winter in R. Museo Berol.).	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Daedalea ochracea, Kalchbr	Ad truncos siccos: Água-Izè, n. 32.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).

Polystictus velutinus (Pers.), Fr	Ad Symphoniam globuliferani: Quimpo	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Stereum subpileatum Berk,	Habitat ad truncos in Ins. St. Thomae; «Pico» altit. 2140 m . Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Stereum subpileatum Berk. et Curt.	Ad arbores insulae S. Thomé frequens: Bacia do rio Contador (1250 m). 7.85, —8.85 . —p r. Lagôa Amelia (1350 m). 7.85. —Nova Moka (900 m). 8.85. —Pico de S. Thomé (1950-2000 m). 6.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Stereum versicolor Swartz	Ad arbores: Bom Successo (1200" 1). 7.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Polyporus strumosus, Fr	Ad truncos Chlorophorae tenuifoliae: Mato Cana.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Telephora aurantiaca Pers.	Habitat ad truncos in Ins. St. Thomae. Leg. Moller, 1885 . (Herb. Winte r in B. Museo Berolinensi).	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Thelephora affinis Berk. et Curt.	Ad lignum putridumi Roca Nova Moka (900 m). 9.85.	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Tricholomopsis aurea	AFRICA. São Tomé, Macambrara, radio antenna area, 1300 m elev.,N00˚16.557', E06˚36.326', 25 April 2008, coll. by D.E. Desjardin, DED 8327 (nLSU–MF100993, ITS – MF100960, SFSU); Parque Nacional Obo, along trail from Bom Succeso to Lagoa Amelia, between N00˚17.112', E06˚35.967' and N00˚16.922', E06˚36.062', 14 April 2008, coll. by B.A. Perry, BAP 618 (nLSU – MF100994, ITS – MF100961, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Trogia aff. *brevipes*	AFRICA. São Tomé,Parque Nacional Obo, on trail to Lagoa Amelia, between˚00˚17.112', E06˚35.967' and N00˚16.922', E06˚36.062', 14 April 2008, coll. by D.E. Desjardin, DED 8241 (SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Thelephora radicans Berk.	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Trametes campestris Quél.	Habitat ad ligna in Ins. Thomae. Leg. A. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Trogia aff. *furcata*	AFRICA. São Tomé, Shipwreck Cove, along EN-1 on north side of theisland at 18 km marker, N00˚23.687', E06˚36.302', 17 April 2008, coll. by D.E. Desjardin. DED 8260(MF100962, SFSU).	Desjardin, D. E., & Perry, B. A. (2017). The gymnopoid fungi (Basidiomycota, Agaricales) from the Republic of São Tomé and Príncipe, West Africa. MYCOSPHERE, 8(9), 1317-1391.
Truncospora detrita		Decock, C. (2011). Studies in Perenniporia sl (Polyporaceae): African taxa VII. Truncospora oboensis sp. nov., an undescribed species from high elevation cloud forest of São Tome. Cryptogamie, Mycologie, 32(4), 383-391.
Truncospora oboensis	Obô National Park, São Tomé, between Base and Mesa camps, approx. 00°15.8′ N – 006°33.2′ E, elev. approx. 18001900 m	Decock, C. (2011). Studies in Perenniporia sl (Polyporaceae): African taxa VII. Truncospora oboensis sp. nov., an undescribed species from high elevation cloud forest of São Tome. Cryptogamie, Mycologie, 32(4), 383-391.
Tulostoma moellerianum		Desjardin, D. E., & Perry, B. A. (2015). Clavarioid fungi and Gasteromycetes from Republic of São Tomé and Príncipe, West Africa. Mycosphere, 6(4), 515-531.
Trametes cubensis Mont.	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Trametes hydnoides (Sw.) Fr.	Habitat ad truncos in Ins. St. Thomae. Leg. Moller (Herb. Winte r in Museo Berol).	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Polyporus albo-gilvus, Berk	Ad Palmam: Água-Izé, nn. él, 62.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Tremella sarcoides (Dicks) Ff.	Habitat ad truncos in Ins. St. Thomae. Leg. Newton, 1887 , et Quintas.	Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Phlebia vaga, Fr.	Ad pileum Fomitis pectinati: Quimpo	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).

Tulostoma mollerianum	Habitat in Ins. St. Thomae. Leg. Ad. Moller, 1885 .	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Ustulina vulgaris Tul.	Habitat ad truncos in Ins. St. Thomae. Leg. Quintas.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Xylaria dichotoma Mont.	Ad lignum pulridum. Roca Saudade (700 m) . 9.85 . — Roc a Nova Moka (900 m) . 9.85 .	Winter, G., Boletim da Sociedade Broteriana, volume 4, 1886, pág. 185-204
Xylaria gigantea (Zipp. Ex Lév.) Fr.	S. TOMÉ. Lagoa Amélia, c. 1480 m., on dead tree, orange-brown	Exell, Arthur Wallis. "Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)." *Catalogue of the vascular plants of S. Tomé (with Principe and Anno-bon)*. (1944).
Favolus brasiliensis Fr.	Hab sur les souches d'arbres "Pico de san Thomé" (Leg. Moller)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Xylaria nigripes (Klotzsch) Cooke	Hab. Surles souches St. Thomé "Angolares" (Moller)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Craterellus crispus (Sow.) Fr	Hab. A terre «Pico de S. Thomé» Sept. 1885 (Leg. Moller).	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Xylaria digitata (Linn.) Grev.	Habitat ad truncos in Ins. St. Thomae. Leg. Ad. Moller.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Xylaria involuta (Klotzsch) Cooke	Hab. Sur les souches St-Thomé. (Moller)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Xylaria polymorpha (Pers.), Grev.	Ad truncos prope terram vel ad radices: Quimpo, n. 65.	Coutinho, António Xavier Pereira. "Florae mycologicae insulae St. Thomae. Contributio." *Anais do Instituto Superior de Agronomia, Vol. 2, p. 1-29* (1925).
Xylaria polymorpha (Pers.) Grev.	Hab. Sur les souches; St. Thomé "Angolares" (Leg Newton)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Xylaria scruposa (Fr.) Berk var. *bifida* Bres.	Hab. Sur les souches St. Thomé (Moller)	Bresadola, G., Revue Mycologique, 1891, pág. 65-69
Xylaria filiformis (Alb. et Schw.) Fr.	Habitat in pericarpio fructus alicujus in Ins. St. Thomae 1. d. «Angolares». Leg . Newton.	Saccardo, P.A., Berlese, A. N., Boletim da Sociedade Broteriana, volume 7, 1889, pág. 159-177
Xylaria polymorpha (Pers.) Grev	Hab. In Insula S. Thomé. Afr. Occid. (Ad. F. Moller)	Saccardo, P. A., Berlese, N. A., Revue Mycologique, 1889, pág. 201-205

Annex II – Samples collected in São Tomé's Island – 16/07/2019 to 11/12/2019

Nº coleta	ID proposta	Local	Data	Coletor(es)	Identificador	Nº exemp. herb.	Notas
1.2019.ASS	*Daldinia concentrica*	Plancas I	16/07/2019	Ana Sofia B. Simões	Ana Sofia B. Simões	1	No caminho que vai dar à estrada de Neves
2.2019.ASS	*Ganoderma* sp	Plancas I	16/07/2019	Ana Sofia B. Simões	Ana Sofia B. Simões	1	No caminho que vai dar à estrada de Neves
3.2019.ASS	*??*	Plancas I	16/07/2019	Ana Sofia B. Simões		0	**ELIMINADO**; Poros alongados c/ margens recortadas cor bege-rosado; Crescimento tipo "trametes"; Branco q escurece p/ amarelo-alaranjado na zona de inserção
5.2019.ASS	*Auricularia* sp	Plancas I - GPS TPI-1B		Ana Sofia B. Simões	Ana Sofia B. Simões	1	
6.2019.ASS	*??*	Saudade - No caminho; GPS 62	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Tronco caído; Gregários; **Transportado em saco de plástico**
7.2019.ASS	*??*	Saudade - GPS 62	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Tronco caído, com musgo; Gregário; Com microalgas no píleo; **Transportado em saco de plástico**
8.2019.ASS	*Xylaria* sp	Saudade - GPS 63	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Tronco caído com musgo; Gregário; **Transportado em saco de plástico**
9.2019.ASS	*Leucocoprinus fragilissimus*	Saudade - GPS 65	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	0	**SEM EXEMPLAR** (desfez-se na viagem); Madeira morta; Pé esverdeado; Solitário; Com anel parcial; Ao pé de bambu; **Transportado em saco de plástico**
10.2019.ASS	*??*	Saudade - GPS 66	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Num tronco caído; **Transportado em saco de plástico**
11A.2019.ASS	*??*	Saudade - GPS 67	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Tronco muito degradado; Solitário; Petalóide (x2); **Transportado em saco de plástico**
11B.2019.ASS	*??*	Saudade - ST1	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Solitário; Área impactada (solo mexido); **Transportado em saco de plástico**
12.2019.ASS	*??*	Saudade - No caminho; GPS 68	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		0	**ELIMINADO**; Numa folha de bananeira caída; Gregário; **Transportado em saco de plástico**
13.2019.ASS	*Tremella fuciformis*	Saudade - No caminho; GPS 69	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	1	Solitário; Num pedaço de ramo; Translúcido; **Transportado em saco de plástico**
14.2019.ASS	*Leucocoprinus fragilissimus*	Saudade - ST3	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	1	Em solo impactado; Solitários; **Transportado em saco de plástico**
15.2019.ASS	*Campanella* sp	Saudade - ST3	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Num ramo/pau; Em grupo; **Transportado em saco de plástico**
16.2019.ASS	*??*	Saudade - ST3	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Em tiras de casca de bananeira; Em grupo; **Transportado em saco de plástico**

17.2019.ASS	*??*	Saudade - ST3	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Solitário; Bananeira morta; **Transportado em saco de plástico**
18.2019.ASS	*??*	Saudade - ST4	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Tronco caído; Solitário; **Transportado em saco de plástico**
19.2019.ASS	*??*	Saudade - ST4	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Gregário; Muito pequenos; Madeira morta; **Transportado em saco de plástico**
20.2019.ASS	*??*	Saudade - ST4	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Madeira morta; Gregário; Exemplar velho; **Transportado em saco de plástico**
21.2019.ASS	*??*	Saudade - ST4	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Bananeira morta; Solitário; Cor de laranja; **Transportado em saco de plástico**
22.2019.ASS	*Crepidotus* sp	Saudade - ST5	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Em bananeira viva; Gregário; Lilás; **Transportado em saco de plástico**
23.2019.ASS	*??*	Saudade - GPS 70	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Num ramo, em grupo; **Transportado em saco de plástico**
24.2019.ASS	*Hypholoma subviride*	Saudade - GPS 70	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Madeira morta; Gregário; Amarelo-dourado; **Transportado em saco de plástico**
25.2019.ASS	*Leucocoprinus fragilissimus*	Saudade - GPS 70	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Muito amarelo; Anel bem definido; No solo; Liberta pó amarelo na parte superior do chapéu; Cheiro ácido; **Transportado em saco de plástico**
26.2019.ASS	*??*	Saudade - ST6	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Higrófano; Madeira morta; Petalóide; **Transportado em saco de plástico**
27.2019.ASS	*??*	Saudade - ST6	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	igual a 28.2019.ASS; Aos pares; Num tronco morto; **Transportado em saco de plástico**
28.2019.ASS	*??*	Saudade - ST6	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Igual a 27.2019.ASS; Muito velho; Num tronco morto; Arroxeado; **Transportado em saco de plástico**
29.2019.ASS	*??*	Saudade - ST6	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Semelhante a 11A.2019.ASS e 26.2018.ASS; Num tronco morto; Gregário; Petalóide; **Transportado em saco de plástico**
30.2019.ASS	*Lepiota* sp	Saudade - SN2	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Com anel bem definido; Com escamas escuras no chapéu; No solo; **Transportado em saco de plástico**
31.2019.ASS	*??*	Saudade - SN2	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Higrófano; No solo; Muito Jovem; **Transportado em saco de plástico**
32.2019.ASS	*Dacrymyces* sp	Saudade - GPS 71	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	2	Num tronco morto; Muitos; Várias fases de desenvolvimento; Micélio branco; **Transportado em saco de plástico**
33.2019.ASS	*Favolaschia* sp	Saudade - GPS 71	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	1	Num tronco morto; Cor de laranja forte; Himenóforo em forma de favo; **Transportado em saco de plástico**

34.2019.ASS	*??*	Saudade - SN3	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Num ramo; Viscoso; Gregário; **Transportado em saco de plástico**
35.2019.ASS	*Xylaria* sp	Saudade - GPS 72	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Tronco morto; Gregário; **Transportado em saco de plástico**
36.2019.ASS	*??*	Saudade - GPS 72	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Myxomycete (não é fungo!); Num tronco morto; Gregário; **Transportado em saco de plástico**
37.2019.ASS	*??*	Saudade - GPS 72	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Num tronco morto; Solitário **Transportado em saco de plástico**
38.2019.ASS	*Ganoderma* sp	Saudade - GPS 73	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	1	Numa bananeira morta/caída; Gregário; **Transportado em saco de plástico**
39.2019.ASS	*??*	Saudade - GPS 73	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Numa bananeira morta/caída; Solitário; **Transportado em saco de plástico**
40.2019.ASS	*??*	Saudade - GPS 74	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Num tronco morto; Parece Turkey tail; **Transportado em saco de plástico**
41.2019.ASS	*??*	Saudade - GPS 75	06/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Numa tábua cortada; Gregários (muitos); **Transportado em saco de plástico**
42.2019.ASS	*??*	Saudade - ST4	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Branco c/ o pé mto amarelo, s/ cheiro, gregário, tipo algodão doce; Parece **myxomycete** mas mto grande
43.2019.ASS	*Gymnopus* sp	Saudade - ST6	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Café c/ leite nas lâminas e chapéu, pé cinzento, em madeira morta, cheiro a terra, quase picante, gregários, c/ pequenos pêlos na base do pé
44.2019.ASS	*??*	Saudade - ST6	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Gregário em madeiera morta; Cinzento azulado no chapéu, mais claro nas lâminas, pé muito denso rígido e escuro, s/ cheiro
45.2019.ASS	*??*	Saudade - ST6	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Cheira a beef jerky/bacon/batatas Lays barbecue, parecem cups mas o himenóforo é ínfero, castanho avermelhado
46.2019.ASS	*Lepiota* sp	Saudade - SN4	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Parece *Amanita* mas s/ volva, c/ anel, cheiro doce, laranja rosado no chapéu
47.2019.ASS	*??*	Saudade - SN5	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva	Ana Sofia B. Simões	1	Cheiro a peixe, chapéu castanho pardo, lâminas castanhas, pé branco c/ tons cinzentos, 1 juvenil, c/anel em roda dentada
48.2019.ASS	*??*	Saudade - SN7	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Pretos, num tronco morto, s/ cheiro
49.2019.ASS	*Auricularia* sp	Saudade - SN7	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Madeira morta, s/ cheiro, castanho
50.2019.ASS	*??*	Saudade - SN6	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Castanho alaranjado no chapéu, pé branco, coprinóide, em madeira no solo

51.2019.ASS	*??*	Saudade - SN7	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		1	Biolouminescente! Azulados, coprinóides, em madeira morta
52.2019.ASS	*??*	Saudade - SN7	30/08/2019	Ana Sofia B. Simões, Daniela Alves, Adilson da Silva		2	Madeira morta, coprinóide peludo, s/ cheiro
53.2019.ASS	*Blumenavia angolensis*	Caminho Fugido - no caminho	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões	1	Antes do Caminho Fugido
54.2018.ASS	*Geastrum* sp	Caminho Fugido - no caminho	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões	1	5 mm Ø
55.2019.ASS	*??*	Caminho Fugido - N 0° 17' 40'', E 6° 36' 43'', 1230 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	P/ descrição
56.2019.ASS	*Xylaria tabacina*	Caminho Fugido - N 0° 17' 40'', E 6° 36' 43'', 1230 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões	1	P/ descrição; Esporada
57.2019.ASS	*Phallus drewesii*	Caminho Fugido - N 0° 17' 40'', E 6° 36' 43'', 1230 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões; Susana C. Gonçalves	2	
58.2019.ASS	*??*	Caminho Fugido - N 0° 17' 25'', E 6° 36' 20'', 1240 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		2	P/ descrição
68.2019.ASS	*??*	Caminho Fugido - N 0° 17' 25'', E 6° 36' 20'', 1240 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	P/ descrição
69.2019.ASS	*Campanella* sp	Caminho Fugido - N 0° 17' 25'', E 6° 36' 20'', 1240 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões	1	P/ descrição
59.2019.ASS	*Xylaria* sp	Caminho Fugido - N 0° 17' 25'', E 6° 36' 20'', 1240 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	P/ descrição
60.2019.ASS	*Xylaria hypoxylon*	Caminho Fugido - N 0° 17' 25'', E 6° 36' 20'', 1240 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	P/ descrição
61.2019.ASS	*Heimiomyces tenuipes*	Caminho Fugido - N 0° 17' 25'', E 6° 36' 20'', 1240 m	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões	1	P/ descrição
62.2019.ASS	*Exidia nucleata*	Caminho Fugido	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves,		2	P/ descrição

				Daniela Alves, Estevão Soares			
63.2019.ASS	*??*	Caminho Fugido	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		2	Crostáceo, c/ poros; P/ descrição
64.2019.ASS	*??*	Caminho Fugido	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	Poliporacea; P/ descrição
65.2019.ASS	*Trogia anthidepas*	Caminho Fugido	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares	Ana Sofia B. Simões	1	Só citada no Príncipe
66.2019.ASS	*??*	Caminho Fugido	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	Jelly; P/ descrição; Foto vem antes do 65.2019.ASS; ≠ 62.2019.ASS
67.2019.ASS	*Stereum* sp	Caminho Fugido	14/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Daniela Alves, Estevão Soares		1	Crostáceo; P/ descrição
70.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	C/ poros; Num dos tabuleiros das orquídeas
71.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	Trametes?; Madeira morta
72.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	Crosta c/ projeção; *Funalia*?
73.2019.ASS	*Auricularia cornea*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop	Ana Sofia B. Simões	2	C/ pêlos maiores que veludo; O que não bate certo: Presença de pé, cor do himénio
74.2019.ASS	Geoglossaceae	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	Na relva, flexível; Geoglossaceae - Earth tongues
91.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		1	
92.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	
93.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	
94.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	Crosta
95.2019.ASS	*Stereum* sp	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop	Ana Sofia B. Simões	2	

96.2019.ASS	*??*	JB Bom Sucesso	16/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, participantes do workshop		2	Xylaria ?; Sem ficha por falta de fotos!
75.2019.ASS	*Pleurotus tuberregium*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Ana Sofia B. Simões	2	Em madeira morta; Gregário; Chapéu Ø 56-292 mm, Pé 55 x 15-22 mm Ø, Esp. carne 2-5 mm
76.2019.ASS	*??*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		1	Coração-de-chão?; No chão cortado; Sem ficha por falta de fotos!
77.2019.ASS	*??*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		2	Gymnopilus? Pholiota? Armillaria?; Variam entre fasciculados e gregários; WRF
78.2019.ASS	*Pleurotus tuberregium*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Ana Sofia B. Simões	1	E madeira morta; Esclerócio na base; Gregário; Pé com zona distinta junto às lâminas
79.2019.ASS	*Panus* sp	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		2	Em madeira morta; Muito peludo; Panus?
80.2019.ASS	*??*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		2	Mycena?; Muitos; Gregários
81.2019.ASS	*Ganoderma* sp	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Ana Sofia B. Simões	2	Em madeira morta
82.2019.ASS	*Leucocoprinus birnbaumii*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Ana Sofia B. Simões	1	Madeira morta; Mto mamelonado c/ escaminhas; Pé sujo de amarelo; C/ rizomorfos; Frágil; Odor cítrico; C/ anel; Pé 80 mm x 3-15 mm
83.2019.ASS	*??*	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		0	**ELIMINADO**; Madeira morta, gregário
84.2019.ASS	*Marasmiellus* sp	Plancas I - N 0° 22' 36'', E 6° 35' 39'', 230 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		2	Pé excêntrico; Gregário; Madeira morta
85.2019.ASS	*Volvariella esculenta*	Plancas I - N 0° 22' 38'', E 6° 35' 37'', 220 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		2	Num Ocá queimado; Gregários, em grupos de 2 ou 3
86.2019.ASS	*??*	Plancas I - N 0° 22' 40'', E 6° 35' 35'', 210 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		2	Prateleira; Gregário; Em tronco de Pau-flor queimado; Gregário, sobreposto
87.2019.ASS	*??*	Plancas I - N 0° 22' 46'', E 6° 35' 31'', 190 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva		1	Em madeira morta; Solitário c/ 2ou 3 primórdios na base
88.2019.ASS	*??*	Plancas I - N 0° 22' 46'', E 6° 35' 31'', 190 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Susana C. Gonçalves	2	Tipo crosta; Num ramo de Pau-flor; Sem ficha por falta de fotos!
89.2019.ASS	*Schyzophyllum commune*	Plancas I - N 0° 22' 46'', E 6° 35' 31'', 190 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Ana Sofia B. Simões	1	Num ramo de Pau-flor com 88.2019.ASS; Sem ficha por falta de fotos!
90.2019.ASS	*Xylaria* sp	Plancas I - N 0° 22' 46'', E 6° 35' 31'', 190 m (savana)	17/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves, Adilson da Silva	Ana Sofia B. Simões	2	Num ramo caído; Gregário

97.2019.ASS	*??*	Macambrará - N 0° 16' 32.142'', E 6° 36' 10.134'', 1357 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Polypore; Solitário, pequeno; Em madeira morta, em cima de fetos mortos colados ao tronco; Himénio bege escuro, píleo castanho, aveludado
98.2019.ASS	*??*	Macambrará - S/ sinal GPS	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Viscoso (c/ muco na inserção do pé no substrato); Branco, chapéu escamoso c/ escamas castanho-claro; Solitário em madeira morta
99.2019.ASS	*Favolaschia calocera*	Macambrará - N 0° 16' 31.638'', E 6° 36' 9.81'', 1322 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	1	
100.2019.ASS	*??*	Macambrará - S/ sinal GPS	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	1	Parece *M. quercophilus*
101.2019.ASS	*Mycena* cf *brunneoviolacea*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	1	Em madeira morta; Solitário; Castanho-amarelado; Sem ficha por falta de fotos!
102.2019.ASS	*??*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Gregário numa árvore viva; Tipo *Thelephora*; Branco na face superior e rosado na face inferior
103.2019.ASS	*??*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	= ao do Caminho Fugido; Sem ficha por falta de fotos!
104.2019.ASS	*??*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Crosta amarela c/ projeção
105.2019.ASS	*??*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Coprinellus? Coprinopsis?; Chapéu c/ escamas brancas e castanhas, cinzento; Pé branco, lâminas cinzento-escuro; Gregário em madeira morta; Sem ficha por falta de fotos!
106.2019.ASS	*??*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Polypore; Castanho-escuro avermelhado; Gregário em madeira morta; Sem ficha por falta de fotos!
107.2019.ASS	*Hypholoma subviride*	Macambrará - no caminho	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Também pode ser *Tricholomopsis aurea*; Ver Desjardin; Fasciculados/cespitosos; Amarelos
108.2019.ASS	*??*	Macambrará - N 0° 20' 44.991'', E 6° 42' 27.941'', 1344 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Em raízes +/- grossas (>1mm), saprófita?; Laranja-claro; Cheiro adocicado mto suave; Perto de Cata-d'Obô
109.2019.ASS	*??*	Macambrará - N 0° 16' 31.122'', E 6° 36' 10.464'', 1323 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Polypore; Preto, mto velho por cima, c/ crescimento novo por baixo; No tronco de uma árvore viva; Sem ficha por falta de fotos!
110.2019.ASS	*??*	Macambrará - N 0° 16' 31.446'', E 6° 36' 9.642'', 1331 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Laranja-vivo c/ margem + clara; Ver artigos; Parece Hygrocybe
111.2019.ASS	*??*	Macambrará - N 0° 16' 31.776'', E 6° 36' 9.564'', 1370 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Solitário, chapéu um pouco cónico da cor do pé (amarelo-esverdeado) c/ escamas cinzento escuro, lâminas da cor do chapéu, em madeira morta
112.2019.ASS	*??*	Macambrará - N 0° 16' 32.292'', E 6° 36' 9.888'', 1355 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Viscosos, gregários, tipo Hygrocybe; Chapéu laranja-avermelhado, pé quase transparente laranja c/ zona vermelha junto às lâminas, lâminas + lamelulas escuteladas, margem do chapéu "em tensão"
113.2019.ASS	*??*	Macambrará - N 0° 16' 32.622'', E 6° 36' 10.188'', 1378 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	*Trogia* sp?; Lâminas tipo *Trogia*, adnatas, chapéu campanulado castanho no centro, gradualmente + claro até à margem (amarelo), pé da cor do castnho intermédio do chapéu, margem do chapéu ondulada; Solitário sobre madeira; Fibras do pé em espiral; Sem ficha por falta de fotos!
114.2019.ASS	*Mycena alphitophora*	Macambrará - N 0° 16' 31.32'', E 6° 36' 10.29'', 1344 m	21/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	1	Branco puro, corpo frutífero <1 mm; Em folhas caídas ou paus; Lâminas + lamelulas; Margem do chapéu serrada, chapéu 3 mm; Solitários
115.2019.ASS	*Calvatia rugosa*	Caminho Fugido - no caminho	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	1	O "pé" amarela c/ a exposição ao ar
116.2019.ASS	*Heimiomyces tenuipes*	Caminho Fugido - N 0° 17' 31.794'', E 6° 36' 26.226'', 1278 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Chapéu amarelo-torrado, da cor das lâminas; Micélio branco; Pé c/ torção; Carne mto fina; Numa raíz, no solo, junto a lianas; Solitário

117.2019.ASS	*Clavaria* sp	Caminho Fugido - N 0° 17' 31.872'', E 6° 36' 23.946'', 1287 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Gregário, numa ríz no solo; Branco puro; Pequenos "tufos"; Por vees bifurcado nas extremidades; = ao da Saudade (folha de bananeira)
118.2019.ASS	*??*	Caminho Fugido - N 0° 17' 32.52'', E 6° 36' 24.978'', 1310 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	*Galerina*? *G. makeriensis*?; Castanhos-alaranjados; Troncos caídos; Gregários, fasciculados/cespitosos; Pé fibroso acinzentado; C/ anel; Micélio branco; Alguns exemplares com cortina; Chapéus sempre subconvexos mesmo em jovem; Entre 3 e 5 cm de comprimento e 1 e 3 cm de Ø chapéu
119.2019.ASS	*??*	Caminho Fugido - N 0° 17' 32.52'', E 6° 36' 24.978'', 1310 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Pequeno (2 cm comp. e <1 cm de Ø); Chapéu castanho, lâminas brancas, pé bege claro quase translúcido; Solitário em madeira mortano solo; Sem ficha por falta de fotos!
120.2019.ASS	*Xylaria telfairii*	Caminho Fugido - N 0° 17' 32.61'', E 6° 36' 25.176'', 1282 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Gregários em madeira morta; Castanho avermelhado (pó que suja); 4-16 cm comp.; Cheiro fúngico forte (trufa); Mtos exemplares no mesmo tronco; Junto a um Gofe vivo
121.2019.ASS	*Mutinus zenkeri*	Caminho Fugido - N 0° 17' 32.61'', E 6° 36' 25.176'', 1282 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Mutinus zenkeri?; Ovos tipo *Phallus*; Apenas 2 "cogumelos" saídos; Mto pequenos (<1 cm); Ovo bege, cogumelo bege com ponta escura e laranja (tipo *Phallus*); Gregários em madeira morta; C/ rizomorfos
122.2019.ASS	*??*	Caminho Fugido - no caminho	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Coprinopsis? Coprinellus?; Gregários em madeira morta mto degradada; Chapéu cinzento c/ escamas + escuras; Pé branco; Lâminas inicialmente branco sujo; Comp. 3 e 12 cm e Ø 3 e 6 cm; Rizomorfos?; Margem do chapéu serrada; S/ lamélulas (apenas lâminas); lâminas livres
123.2019.ASS	*??*	Caminho Fugido - N 0° 17' 33.216'', E 6° 36' 24.76'', 1314 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Higrófano; Pé quase inexistente; Brancos, petalóides (fan); C/ lâminas; Mto viscosos (colam-se aos dedos); Gregários em madeira morta; Por vezes juntos em pares; Até 1 cm de Ø
124.2019.ASS	*??*	Caminho Fugido - no caminho	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Crosa; Gregário, em madeira morta; Grande extensão; Rosa claro quase laranja; Pústulas em vez de poros; Sem ficha por falta de fotos!
125.2019.ASS	*Geastrum schweinitzii*	Caminho Fugido - N 0° 17' 32.712'', E 6° 36' 20.40'', 1287 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Gregário em madeira morta; Muitos; Quando fechados castanho-claro; Quando aberte bege na estrela, e cinza no centro (gleba) c/ opérculo com colar branco; mm fechado, 1 cm Ø aberto
126.2019.ASS	*Xylaria* sp	Caminho Fugido - N 0° 17' 32.712'', E 6° 36' 20.40'', 1287 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Gregário em madeira morta; Pretos, + claros nas extremidades por causa dos esporos, ponta branca no fim; Ramifica 2-3 vezes; Aprox. 6 cm de comprimento
127.2019.ASS	*??*	Caminho Fugido - N 0° 17' 32.106'', E 6° 36' 20.916'', 1305 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Mto amarelo; Chapéu plano; Micélio branco; C/ mtas lamelulas (lâminas que bifurcam + lamélulas) de tamanhos diferentes; Tipo *Hygrocybe*; Lâminas adnatas com dente
128.2019.ASS	*Ganoderma* sp	Caminho Fugido - no caminho	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Gregário em madeira morta; Petalóide
129.2019.ASS	*??*	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Tipo *Hygrocybe*; Solitário no solo; Pé cilíndrico esbranquiçado, lâminas largas e espaçadas; Chapéu amarelo alaranjado; Comp. 3 cm, Ø 4 cm
130.2019.ASS	*??*	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		2	Chapéu avermelhado, pé laranja e lâminas esbranquiçadas na margem; Lâminas grossas e espaçadas; Comp. 1-3 cm, Ø 0,5-2,5 cm; Solitários
131A.2019.ASS	*Campanella* sp	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Branco acinzentado; Pregas; Pé ausente; Gregário em pequenos ramos caídos; Sem ficha por falta de fotos!
131B.2019.ASS	*??*	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Solitário; Chapéu laranja-claro, pé da mesma cor, lâminas grossas e espaçadas esbranquiçadas; Comp. 3 cm, Ø 2 cm; Sem ficha por falta de fotos!
132.2019.ASS	*??*	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		1	Solitário; Chapéu hirsuto em tons de castanho; Lâminas amarelo enxofre; Pé branco tingido de amarelo na base

133.2019.ASS	*Clavulinopsis amoena*	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves	Ana Sofia B. Simões	2	Claviforme não ramificado; Amarelo vivo quase flourescente; Comp. > 2cm; Sem ficha por falta de fotos!
134.2019.ASS	*??*	Caminho Fugido - N 0° 17' 35.28'', E 6° 36' 20.262'', 1295 m	22/10/2019	Ana Sofia B. Simões, Susana C. Gonçalves		0	**ELIMINADO;** Solitário; Chapéu vermelho + escuro no centro; Lâminas brancas; Pé vermelho-alaranjado; Comp. 2,5 cm, Ø 1 cm
135.2019.ASS	*??*	Macambrará - no caminho	22/10/2019	Daniela Alves		1	Vermelho; No caminho T3; Sem ficha por falta de fotos!
136.2019.ASS	*??*	Macambrará - no caminho	22/10/2019	Daniela Alves		1	Polypore; T3B; Sem ficha por falta de fotos!
137.2019.ASS	*??*	Macambrará - no caminho	22/10/2019	Daniela Alves		2	Polypore; T3B; Sem ficha por falta de fotos!
145.2019.ASS	*??*	Chamiço - N 0° 18' 47.862'', E 6° 35' 48.972'', 921 m	29/10/2019	Ana Sofia B. Simões		1	Entomoparasita?, em cima de uma folha; Branco
138.2019.ASS	*Lentinus* sp	Abade - N 0° 15' 15.156'', E 6° 39' 4.242'', 398 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda		1	Em madeira morta no chão; Junto a Budo-budo; Fasculares a gregários
139.2019.ASS	*Hypholoma subviride*	Abade - N 0° 15' 16.476'', E 6° 39' 6.726'', 340 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda	Ana Sofia B. Simões	2	Fasciculados, Em madeira morta de Eritrineira
140.2019.ASS	*Auricularia* sp	Abade - N 0° 15' 16.092'', E 6° 39' 6.474'', 361 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda	Ana Sofia B. Simões	2	Num ramo caído
141.2019.ASS	*Volvariella* sp	Abade - N 0° 15' 19.536'', E 6° 39' 7.02'', 350 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda		1	C/ volva; Solitário, no solo; Micélio branco; Ao lado de Folha-igreja
142.2019.ASS	*??*	Abade - N 0° 15' 18.672'', E 6° 39' 5.4'', 340 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda		2	Em ramos caídos de Safu-d'Obô; Gregários a fasciculados; Muitos
143.2019.ASS	*Xylaria* sp	Abade - N 0° 15' 18.672'', E 6° 39' 5.51'', 363 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda	Ana Sofia B. Simões	2	Gregário em ramo caído de Eritrineira; Preto em jovem, e depois branco; Esporos brancos
144.2019.ASS	*??*	Abade - N 0° 15' 18.456'', E 6° 39' 4.026'', 387 m	06/11/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento, Osmar Cabinda		1	Crosta c/ projeções (1 a 4 por "mancha"); C/ poros mto pequeninos; Gregário em madeira morta de Moindro
147.2019.ASS	*??*	Monte Carmo - N 0° 8' 49.242'', E 6° 34' 38.388'', 255 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		2	Gregários num ramo; <1 cm Ø; Branco puro; Sem pé vestigial; S/ cheiro
148.2019.ASS	*??*	Monte Carmo - N 0° 8' 50.244'', E 6° 34' 37.77'', 249 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Gregários; Tronco morto; Vários estágios; Tipo *Fomes* ou *Inonotus*
149.2019.ASS	*Clavulinopsis amoena*	Monte Carmo - N 0° 9' 2.172'', E 6° 34' 24.57'', 320 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	1	Gregário; Perto de raízes; Laranja-claro; Tipo *Clavulina*; Em solo

150.2019.ASS	*??*	Monte Carmo - N 0° 9' 3.096'', E 6° 34' 21.714'', 319 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Gregários a fasciculados; Muito amarelos; Wax caps; Num tronco morto; Mto numerosos; Cheiro fúngico
151.2019.ASS	*Trogia infundibuliformis*	Monte Carmo - N 0° 9' 3.69'', E 6° 34' 19.962'', 325 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	1	Solitário; Cinzento; Num ramo; Micélio lilás; Cheiro adocicado; Himénio entre pregas e lâminas
152.2019.ASS	*Aphelaria subglobispora*	Monte Carmo - S/ sinal GPS	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	1	Fasciculados a gregários; Roxo com partes brancas; No solo; Exemplares jovens; Cheiro a flores
153.2019.ASS	*Tremella fuciformis*	Monte Carmo - S/ sinal GPS	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	2	Snow fungus; Cheiro doce e fresco; Solitário; Num tronco caído
154.2019.ASS	*Pholiota* sp	Monte Carmo - N 0° 9' 4.596'', E 6° 34' 16.056'', 373 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Fasciculado com 2; Anel mto frágil; Restos de cortina na margem; Chapéu glanduloso; Tipo *Stropharia*
155.2019.ASS	*Hymenoscyphus* sp	Monte Carmo - N 0° 9' 8.568'', E 6° 34' 9.906'', 304 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Gregários; Num ramo; Com musgo; Tipo *Nectria* mas com pé; <1cm (2-3 mm Ø)
156.2019.ASS	*Clavaria* sp	Monte Carmo - S/ sinal GPS	25/11/2019	Ana Sofia B. Simões, Daniela Alves		2	*Clavaria*?; = 149.2019.ASS; 3,4-3,5 cm comp, 1-2 mm espes.; Simples ou bifurcado (x2); Cor H45:20:100
157.2019.ASS	*??*	Monte Carmo - N 0° 9' 9.636'', E 6° 34' 10.584'', 326 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Gregários; Num ramo; Vários estágios; Num ramo anteriormente colonizado por *Mycena*; Pé tem granulos em jovem; Granulos diferentes em maduro
158.2019.ASS	*??*	Monte Carmo - N 0° 9' 9.468'', E 6° 34' 9.774'', 326 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Gregários numerosos; Mto pequeninos (1-2 mm); Inicialmente cinzentos, brancos na ponta; Madeira queimada
159.2019.ASS	*??*	Monte Carmo - N 0° 9' 8.826'', E 6° 34' 9.318'', 291 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	No solo; Solitário; Exemplar jovem; Cheira a queimado; Amarelo
160.2019.ASS	*??*	Monte Carmo - N 0° 9' 9.402'', E 6° 34' 7.926''	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Solitário; Ramo caído; Cheiro a laranja-doce; Poros mto pequenos e apertados; Perto de musgo; Bruising; 9 mm de altura, pétalas 5 x 3-4 mm
161.2019.ASS	*??*	Monte Carmo - N 0° 9' 9.402'', E 6° 34' 7.926''	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Tipo *Calvulina*; Solitário; No solo; Perto de raízes; Branco; Cheiro suave a lula/polvo cozinhado; 35 mm de altura
162.2019.ASS	*??*	Monte Carmo - N 0° 9' 10.398'', E 6° 34' 7.638'', 338 M	25/11/2019	Ana Sofia B. Simões, Daniela Alves		1	Gregários; Madeira morta; Vários estágios; Crescimento tipo *Ganoderma*; Tipo *Ganoderma* muito escuro e disforme; Bruising; Sem ficha por falta de fotos!
163.2019.ASS	*Cotylidia* sp	Monte Carmo - N 0° 9' 9.396'', E 6° 34' 7.464'', 324 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	2	Numa raíz; Branco; Cheio a fungo
164.2019.ASS	*??*	Monte Carmo - N 0° 9' 10.344'', E 6° 34' 6.3'', 342 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		2	Gregários muito numerosos; Madeira morta; Inicialmene branco, mais tarde amarelo acastanhado; Himénio entre pregas e lâminas; Vários estágios; Sofia cheirou a farinha e Daniela cheirou a mentol
165.2019.ASS	*Clavaria* sp	Monte Carmo - N 0° 9' 10.068'', E 6° 34' 4.14'', 350 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves		2	Solitário; Parecido c/ *Ramaria*; No solo
166.2019.ASS	*Hypholoma subviride*	Monte Carmo - N 0° 9' 9.75'', E 6° 34' 3.99'', 367 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	2	Fasciculados; Ver exemplar do Caminho Fugido; Madeira morta
167.2019.ASS	*Cantharellus rufopunctatus*	Monte Carmo - N 0° 9' 9.75'', E 6° 34' 3.99'', 367 m	25/11/2019	Ana Sofia B. Simões, Daniela Alves	Ana Sofia B. Simões	1	Solitário; No solo; Junto a raízes; Robusto; Cheiro suave
168.2019.ASS	*??*	Saudade	12/09/2019	Ana Sofia B. Simões		1	Macrolepiota?; Sem ficha por falta de fotos!
169.2019.ASS	*??*	Saudade	10/09/2019	Ana Sofia B. Simões		1	Sem ficha por falta de fotos!

171.2019.ASS	*Phallus indusiatus*	Saudade	10/09/2019	Ana Sofia B. Simões	Ana Sofia B. Simões	2	
170.2019.ASS	*??*	Saudade	23/08/2019	Ana Sofia B. Simões		1	Sem ficha por falta de fotos!
172.2019.ASS	*Calvatia rugosa*	Saudade	03/09/2019	Ana Sofia B. Simões	Ana Sofia B. Simões	2	
173.2019.ASS	*Trogia infundibuliformis*	Base Pico Cão Grande - s/ sinal GPS	11/12/2019	Ana Sofia B. Simões, Daniela Alves, António (Monte Pico)	Ana Sofia B. Simões	2	Gregários; Madeira Morta
174.2019.ASS	*Clavaria* sp	Base Pico Cão Grande - 0° 7' 15,324'' N, 6° 34' 27,12'' E, 81 m	11/12/2019	Ana Sofia B. Simões, Daniela Alves, António (Monte Pico)		2	Tipo *Clavulina*; Gregário; No chão; Branco
175.2019.ASS	*Tremellodendron* sp	Base Pico Cão Grande - 0° 7' 13,704'' N, 6° 34' 26,196'' E, 89 m	11/12/2019	Ana Sofia B. Simões, Daniela Alves, António (Monte Pico)		2	FALTA A DESCRIÇÃO
176.2019.ASS	*Cyathus limbatus*	Plancas I - Ver print 1	10/12/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento	Ana Sofia B. Simões	2	
177.2019.ASS	*Trametes villosa*	Plancas I - Ver print 2	10/12/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento		2	
178.2019.ASS	*Lentinus squarrosulus*	Plancas I - Ver print 4	10/12/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento	Ana Sofia B. Simões	2	
179.2019.ASS	*Lentinus squarrosulus*	Plancas I - Ver print 3	10/12/2019	Ana Sofia B. Simões, Daniela Alves, Anaximenes Nascimento	Ana Sofia B. Simões	2	
						255	