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## ICE FUNGI: BIBLIOGRAPHIC RESEARCH ABOUT BRAZIL'S SCIENTIFIC CONTRIBUITION IN ANTARCTICA

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MARTINS; Daniel de Andrade 1, NOBRE; Steffany Virgolino Araujo 2, ANDRADE; Guilherme Afonso Kessler de 3, VARGAS; Maria Victoria Magalhaes de 4, BERNADES; Bruna Mota <sup>5</sup>, BOHI; Sara <sup>6</sup>, VICTORIA; Filipe de Carvalho <sup>7</sup>

## **RESUMO**

Fungi are known for its extreme capability of colonizing several environments, even the harsh ones, such as Antarctica. In this continent everything is extreme, poor precipitation levels, dry climate, extreme low temperatures and high UV radiation incidence. To survive all these adversities, the fungi must be highly adapted to its substrata, which consists of rocks and soils, and need to be able to grow and reproduce in this type of climate, they can also live in association with algae, forming the lichens. Some of the Antarctic fungi were carried by birds on its feathers and even human presence could place a role, bringing spores inside the ships and infected equipment. In order to deepen the knowledge about the work developed by Brazilian researchers regarding Antarctic fungi, a search on the platform "web of science" for the key words, "Antarctic fungi", "Antarctic fungus", "Antarctic yeasts" and "Antarctic mushroom", was made. As a result, 738 papers were found, where mostly focus on Microbiology (177 works) and Ecology (136 works). The 5 countries with more published papers are United States of America (137 papers), followed by Italy (90 papers), England (86 papers), China (74 papers) and Brazil (59 papers). In Brazil, almost all the papers come from Federal Universities that have some sort of support from the government, the university with most published papers is UFMG (Universidade Federal de Minas Gerais) with 27 papers, followed by USP (Universidade do Estado de São Paulo) with 20 papers. Within the universities, the authors with most published papers are Rosa L.H with 27 papers, Rosa C.A with 22 papers and Sette L.D. with 11 publications. These publications were only possible because of financial institutes like CNPQ (Conselho Nacional de Desinvolvimento Científico e Tecnológico) that gave financial support to 37 publications, CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior) supporting 24 publications along with FAPEMIG (Fundação de Amparo a Pesquisa do Estado de Minas Gerais ) financing 22 papers. 2019 was the best year for brazilian Antarctic's fungi research with 10 publications followed by 2018 with 9 publications. Brazil is the fifth country to do experiments about Antarctica's fungi with 59 publications by 12/02/2020. Brazil does an important role in Antarctica with programs like PROANTAR since there is not much research about fungus in Antarctica, however with the advancement of knowledge about the potential of fungi added to the advancement of technologies in favor of science, it is expected that, over the years, these numbers will increase considerably, coming to establish

Unipampa, steffanyvirgoolinoo@gmail.com

Unipampa, guilhermeafonsok@gmail.com
 Unipampa, mariavictoriamagalhaes@gmail.com

Unipampa, bruna.motaber@gmail.com Uninamna hohisara98@gmail.com

<sup>7</sup> Unipampa, filipevictoria@gmail.com

Brazil as one of the largest countries to do research with Antarctic mycology.

PALAVRAS-CHAVE: Antarctic, Fungi, Bibliographic, Web of Science

<sup>1</sup> Unipampa, danaielmats@gmail.com
2 Unipampa, steffanyvirgoolinoo@gmail.com
3 Unipampa, guilhermeafonsok@gmail.com
4 Unipampa, mariavictoriamagalhaes@gmail.com
5 Unipampa, bruna.motaber@gmail.com
6 Unipampa, bohisara98@gmail.com
7 Unipampa, filipevictoria@gmail.com