

The Global Fungal Red List Initiative



THE IUCN RED LIST
OF THREATENED SPECIES™

Complementary values of animals, **fungi** and plant in nature conservation



Anders Dahlberg

Swedish University of Agricultural Sciences, Uppsala,

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The Global

Fungal Red List Initiative



THE IUCN RED LIST
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Voluntary based

Invite many to contribute

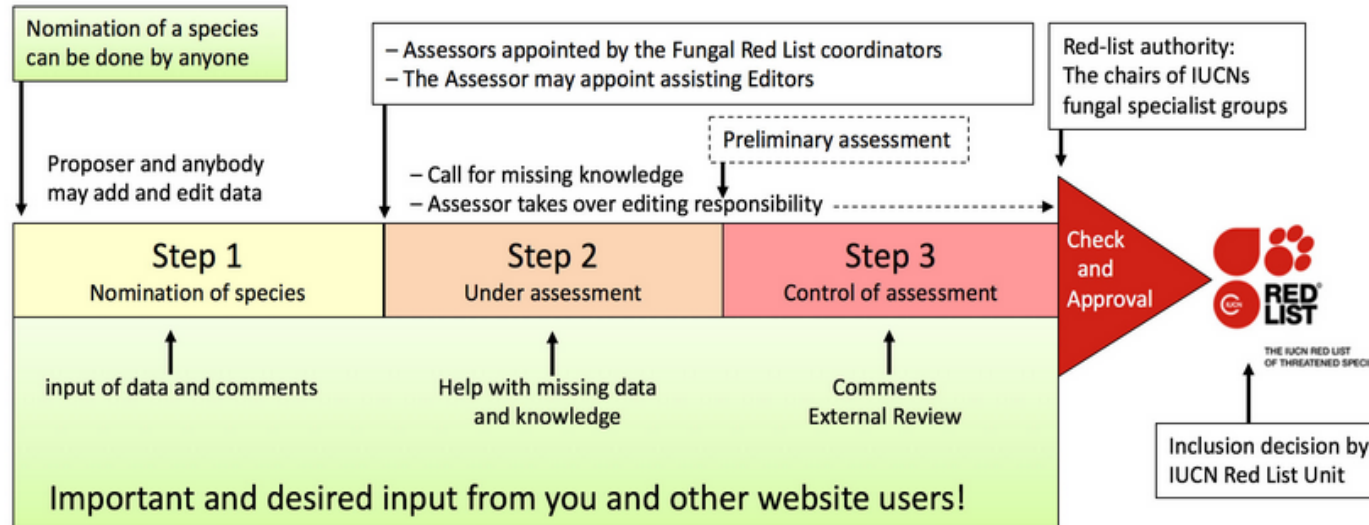
Simplify the process

Aim to get fungi & fungal conservation better known

The Global Fungal Red List Initiative

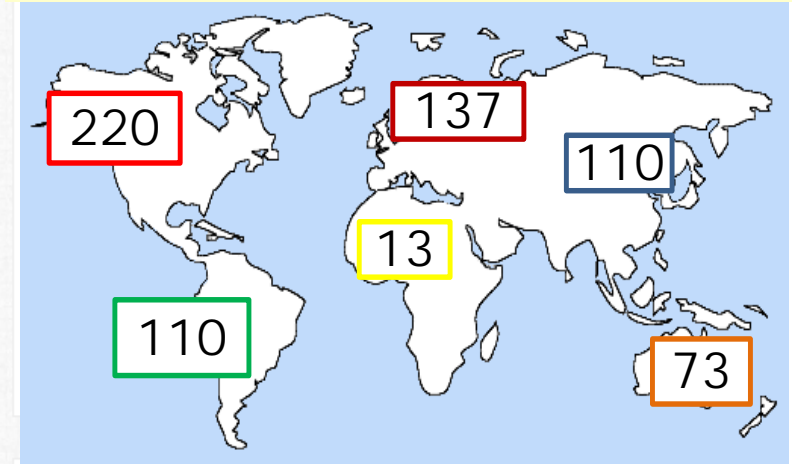


Species of fungi are threatened by habitat loss, loss of symbiotic hosts, pollution, over exploitation, and climate change, but the vast majority of fungal species have not been assessed.



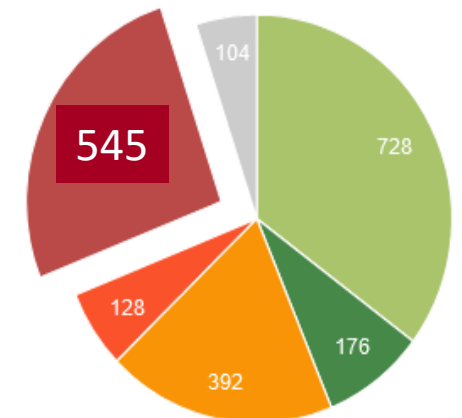
The aim of the global IUCN Red List of Threatened Species™ is to convey the urgency of conservation issues to the public and policy makers, as well as help the international community reduce species decline and extinction. The IUCN Red List is widely recognized as the most comprehensive, objective global approach for evaluating the conservation status of animal, fungal and plant species, and it has a large impact on the setting of priorities in nature conservation.

Presently globally red-listed



Current Assessment status

- Proposed
- Under Assessment
- Preliminary Assessed
- Assessed
- Published
- Pending



Check the web site

> 1800 fungal candidate species; >700 volunteers from 79 countries

470 Fungal Species Published on The IUCN Red List – Including 137 From Europe



The IUCN Red List of Threatened Species™ is the world's most comprehensive information source on the conservation status of the species that inhabit our planet.

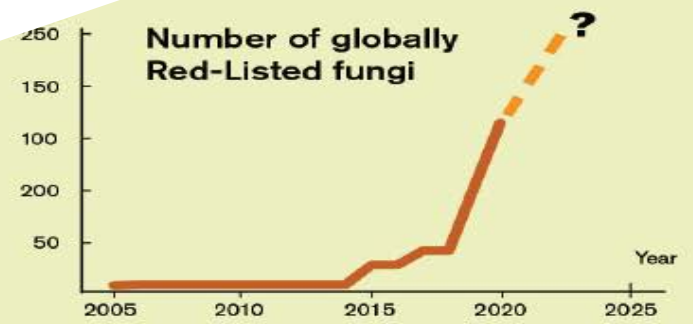
Strengthens national & enables European Conservation Initiatives

Fungal conservation became global thanks to the contributions of many mycologists. In the world, the number of Red-Listed fungi has greatly increased since 2015.

The largest number of European species are thanks to the hard work of mycologists in Europe.

While much progress has been made, the conservation status of many more species needs to be assessed. Participation by many is needed for the success to continue.

Number of globally Red-Listed fungi:
The number of globally Red-Listed fungi has increased significantly since 2015, reaching over 200 by 2020. The trend continues to rise, with a question mark indicating the status for 2025.



Despite their diversity and importance, fungi are among the least represented groups in the global IUCN Red List and until very recently missing.



Fungal Monitoring of Swedish Forest soils

through the Swedish
National Forests and Soil Inventories

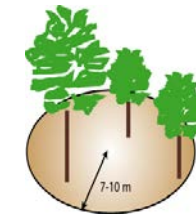


Fungi in Swedish forest soils

Who, where and what do they do?



The Swedish National Forest Inventory
Swedish Forest Soil Inventory



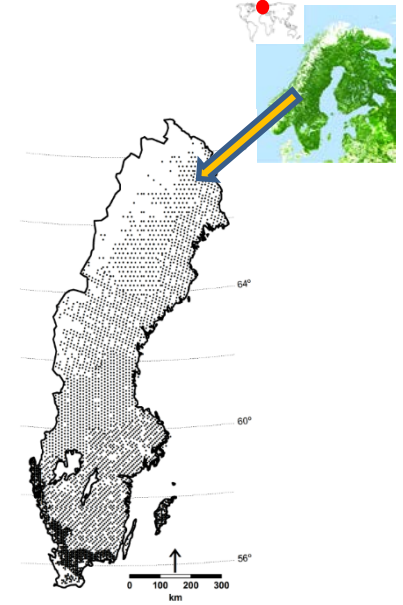
Since 1983
Permanent plots
10 year cycle
1 000 forest plots/year

e-DNA



Identification

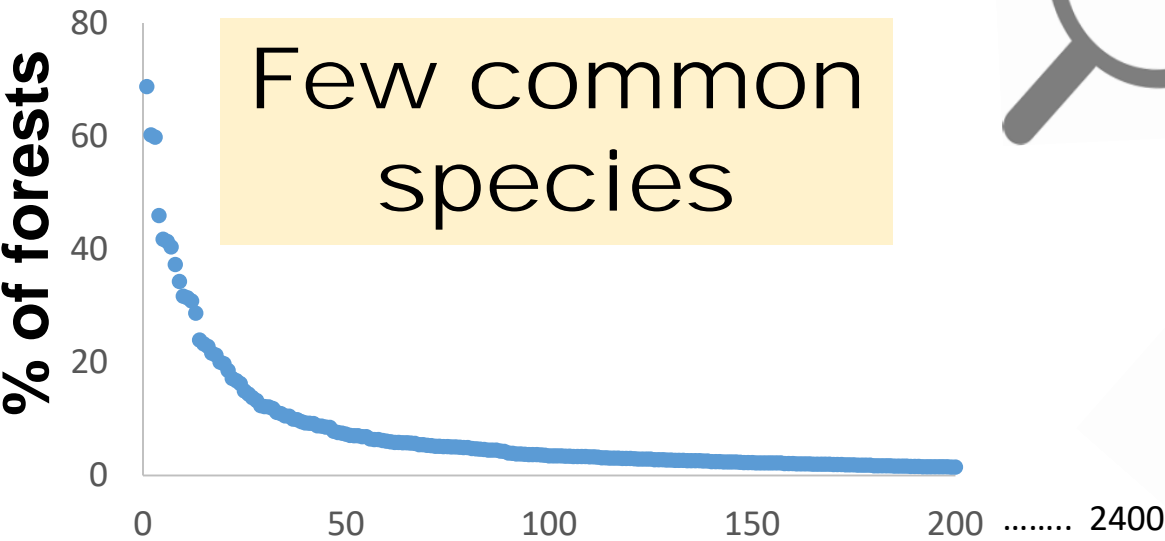
Fungal monitoring
since 2015



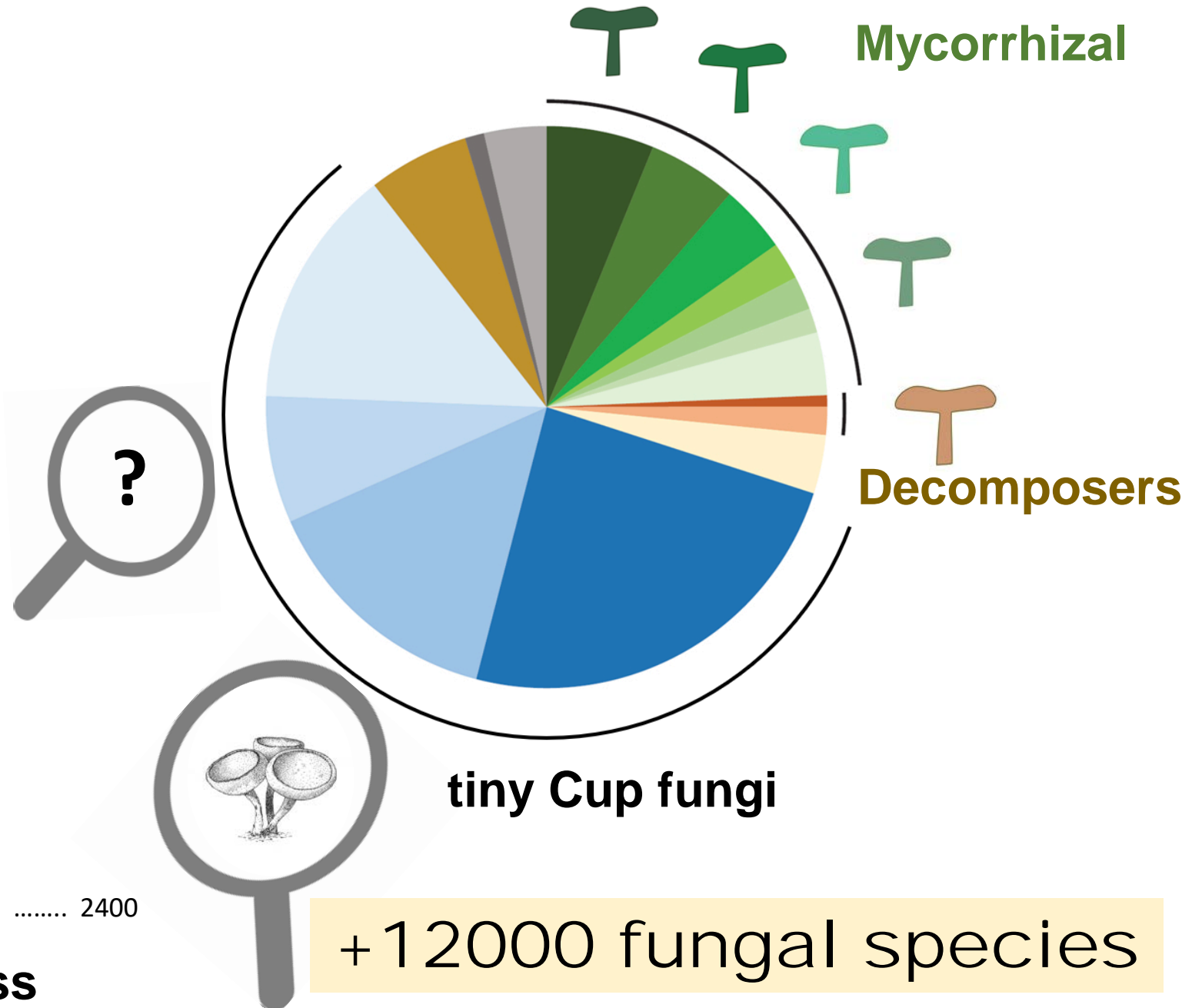


1821 forests

data 2014-2019



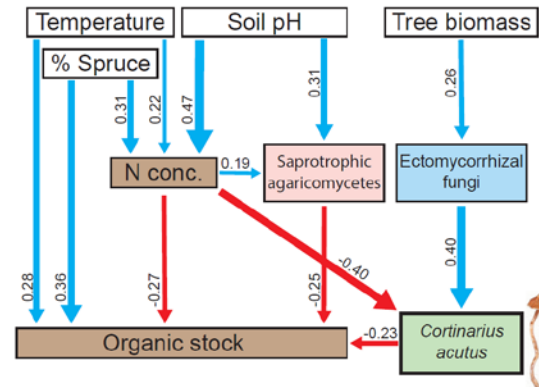
Fungi ranked by commonness



Presence of certain fungi impact soil processes



30% less carbon in soil
- if this common webcap is present



5 cm

A group of ectomycorrhizal fungi restricts organic matter accumulation in boreal forest, *Ecology Letter* 2021:24

Lindahl, Kyaschenko, Varenus, Clemmensen, Dahlberg, Karlton & Stendahl.

Cortinarius acutus