

# IUCN SSC Chytrid, Zygomycete, Downy Mildew, Slime Mould Specialist Group

2020 Report



Mayra Camino



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## Co-Chairs

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## Location/Affiliation

<sup>(1)</sup> National Botanic Garden, University of Havana, Havana, Cuba

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## Number of members

25

## Social networks

Facebook:

Slime Mold Identification & Appreciation

Website:

[www.cybertruffle.org.uk/moulds/index.htm](http://www.cybertruffle.org.uk/moulds/index.htm)



## Mission statement

The mission of our IUCN Specialist Group is to promote the conservation of chytrids, downy mildews, myxomycetes and zygomycetes.

## Projected impact for the 2017-2020 quadrennium

By the end of 2020, we envision a substantial advance in understanding extinction risks for certain ecological groups of myxomycetes (slime moulds), chytrid, zygomycete, downy mildew and particular species. One of the most important aspects of evaluating possible impacts of climate change and anthropogenic influence is to demonstrate that changes are occurring in the distribution of particular species. In future research, at least two possible effects of climate change and other negative impacts should be clearly distinguished. First, the negative impacts on composition of species assemblages, which does not necessarily threaten particular species, must be assessed. Second, the negative impacts on a single species, which may well be threatened and thus would warrant inclusion on Red Lists, needs to be evaluated. In addition, promotion of conservation activities for neglected groups of living organisms will provide a more comprehensive vision of how nature processes function; in particular, attention needs to be focused on discovering the role of chytrids, zygomycetes, downy mildews, and myxomycetes in people's lives and their relationships with other species. Furthermore, the conservation action network of experts and amateurs will expand.

## Targets for the 2017-2020 quadrennium

### Assess

Red List: complete assessment of 100 species of myxomycetes (slime moulds).

Research activities: (1) study climate change impacts on myxomycetes, chytrid, zygomycete, downy mildew; (2) analyse population trends, threats, and assess species using the IUCN Red List criteria and determine conservation actions for chytrids, zygomycetes, downy mildews, and slime moulds.

### Plan

Policy: promote the conservation of different groups of living organisms that were not considered to be in danger before but are in need of protection today.

### Network

Capacity building: train professionals on how to carry out Red List assessments.

Synergy: organise a network of specialists and stakeholders for discussing conservation problems for 'lower fungi' and for exchange of successful protection measures.

### Communicate

Communication: advance conservation activity for chytrids, zygomycetes, downy mildews and slime moulds.

## Activities and results 2020

### Assess

#### Red List

**i.** During 2020, more attention has been paid to the collection and analysis of data to complete species assessment, raising awareness of conservation needs and of progress being made in myxomycetes and low fungal conservation. (KSR #1)



*Metatrachia vesparia*, Ukraine  
Photo: Alain Michaud

*Lamproderma lycopodiicola*, Norway  
Photo: Alain Michaud



*Physarum tenerum*, Guadeloupe  
Photo: Alain Michaud

### Research activities

i. Group members are working on the project 'Multilevel local, nation- and region wide education and training in climate services, climate change adaptation and mitigation', co-funded by the Erasmus+ Programme of the European Union. (KSR #43)

### **Plan**

#### Policy

i. We raised awareness of the importance of conservation of different groups of living organisms that were not considered to be in danger before but need protection today. (KSR #2)

### **Network**

#### Capacity building

i. Annual meetings in 2020 had to be cancelled due to quarantine, but online communication about fungi Red List assessments increased and were raised to a new level. (KSR #5)

#### Synergy

i. The creation of the Fungal Conservation Committee increased partnering for information and coordination of fungal conservation needs and activities for the mycological, land management, and conservation communities. (KSR #29)

### **Communicate**

#### Communication

i. The new ideas for group strategy have developed as result of the online workshops 'Assessing species' extinction risk using IUCN Red List Methodology'. (KSR #28)

### **Acknowledgements**

We acknowledge the Mohamed bin Zayed Species Conservation Fund for the opportunity to participate in International Union for Conservation of Nature Species Survival Commission Leaders' Meeting.

### **Summary of activities 2020**

Components of Species Conservation Cycle: 4/5

Assess	2	
Plan	1	
Network	2	
Communicate	1	

Main KSRs addressed: 1, 2, 5, 28, 29, 43

KSR: Key Species Result