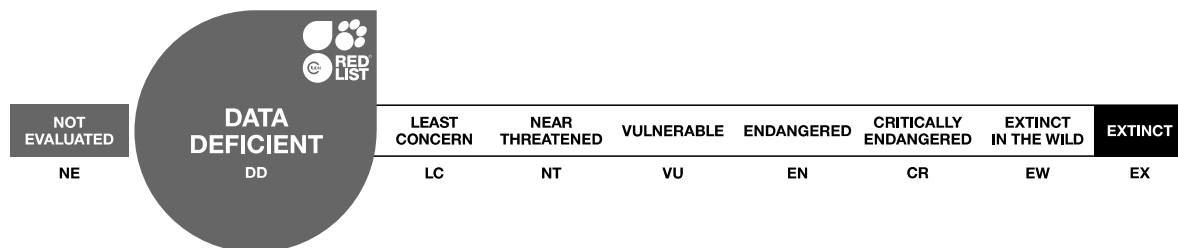


Capronia capucina

Assessment by: Sánchez, R.



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Eurotiomycetes	Chaetothyriales	Herpotrichiellaceae

Scientific Name: *Capronia capucina* R.M. Sánchez, A.N. Mill. & Bianchin.

Taxonomic Source(s):

Index Fungorum Partnership. 2023. Index Fungorum. Available at: <http://www.indexfungorum.org>.

Assessment Information

Red List Category & Criteria: Data Deficient [ver 3.1](#)

Year Published: 2023

Date Assessed: December 16, 2022

Justification:

Capronia capucina is known from only two sites of the Andean Patagonian forest of Argentina, associated with bark of living Nothofagaceae trees. It is saprophytic on the bark of *Nothofagus alpina* and *N. antarctica*. These plants are restricted to the Argentinean and Chilean Patagonian forests, in areas with a temperate to cold climate with high humidity, strong westerly winds and frequent snowfall. It is suspected that the fungus may occur along the distribution of these known hosts plants, over 700m asl, and probably in the more humid areas. However, further surveys are required to ascertain whether this is the case or not.

There are many threats to the habitat of the associated plants, such as fires (the principal threat), the use of the forest land for housing installations, livestock, extraction of wood and soil, recreation activities and tourism; and these are causing a decline in the forest area. An additional and growing threat to this habitat is climate change, which is of particular concern as Nothofagaceae trees exhibit poor dispersal ability and may not be able to adapt in response to a warming climate. Despite extensive surveys elsewhere in the Andean Patagonia forest, additional records for the species have not been made so far, making estimation of population size and trend difficult. It is not possible to accurately estimate the extinction risk of this species, and so *C. capucina* is assessed as Data Deficient.

Geographic Range

Range Description:

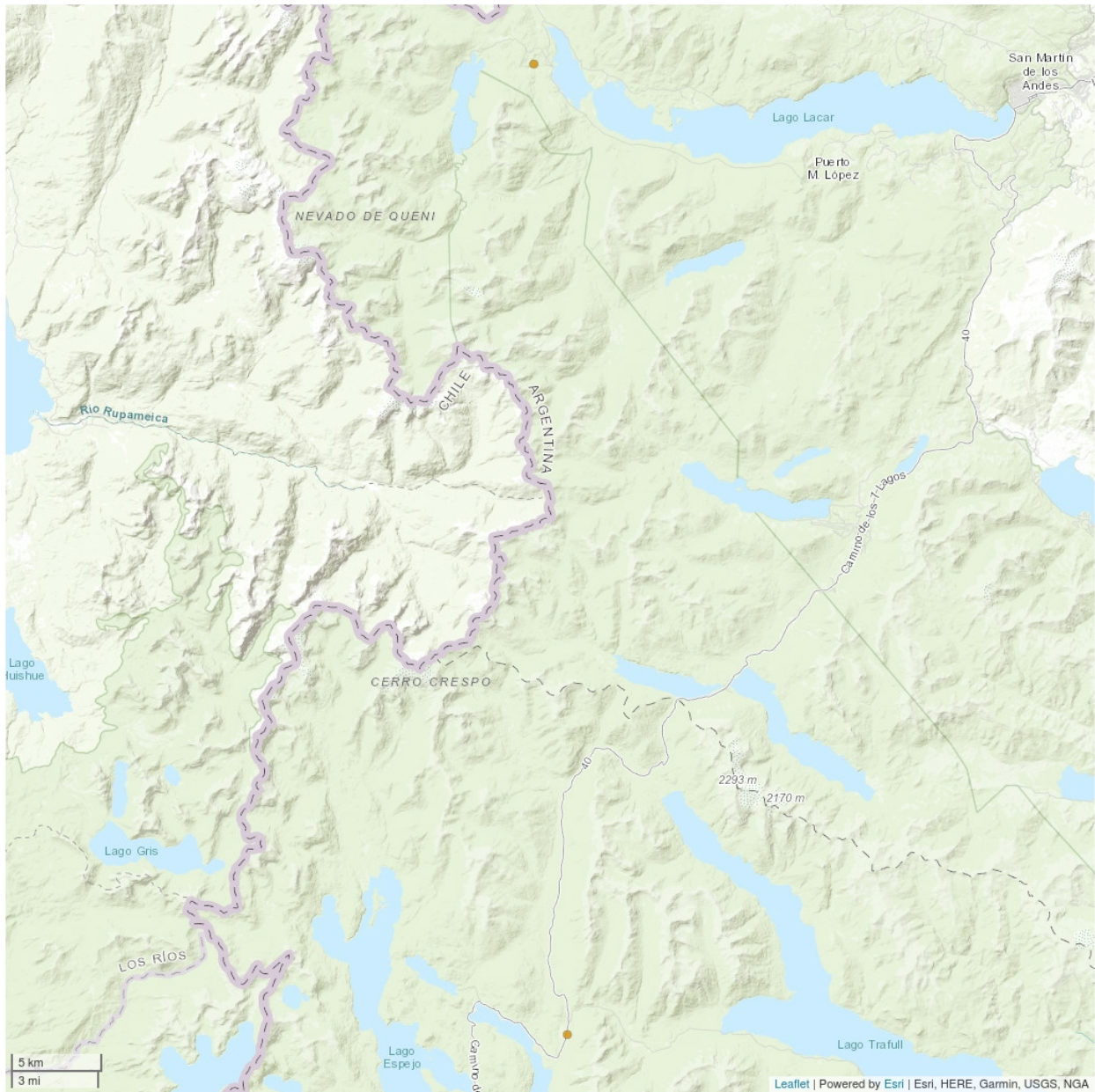
Capronia capucina has a restricted distribution with only two localities known so far from the Andean Patagonian forest of Argentina, more precisely two nature reserves: Parque Nacional Nahuel Huapi and Parque Nacional Lanín. The known hosts plant species occur in Argentina and Chile; *Nothofagus alpina* is more frequent in Chile from 34.4° to 44° south but in Argentina is only present approximately between 39° and 41° south, in an altitude range around 200 to 1,200 m asl.; and *Nothofagus antarctica* is distributed along the Andean forest from 36° south to the region of Tierra del Fuego (Argentina) and Magallanes (Chile).

Country Occurrence:

Native, Extant (resident): Argentina

Native, Possibly Extant (resident): Chile

Distribution Map

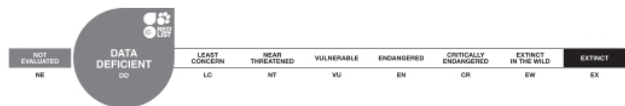


Legend

■ EXTANT (RESIDENT)

Compiled by:

IUCN 2022



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

Population

Capronia capucina is known from two different sites of the Andean Patagonian forest of Argentina, so far recorded to be associated with bark of living *Nothofagus alpina* and *N. antarctica*. These plants occur in the Argentinean and Chilean Patagonian forests, in areas with a temperate to cold climate with high humidity, strong westerly winds and frequent snowfall. Of the two sites where this fungal species has been found, in one of them (40°37'5.41"S, 71°38'48.79"W, 892m asl.), Parque Nacional Nahuel Huapi, it was found in association with three different *N. antarctica* trees; and in the other site (40°8'25.29"S, 71°40'3.84"W, 757m asl.), it was associated with one *N. alpina* tree. It is possible that the fungus occurs along the distribution of *N. alpina* and *N. antarctica*, over 700m asl., and also in more humid areas, but further survey work is required to ascertain this.

Due to its very small size this species may be easily overlooked but, based on extensive surveys (20 different sites visited in three national parks) from the middle to northern part of the forest, the collections seem to indicate that it has a restricted distribution, but further work is needed to confirm this; although the fungus likely occurs in the Nothofagaceae of Chile. Extensive surveys elsewhere in the Andean Patagonia forest have failed to find this species, and there is no clear information with which to calculate its population size and trend. Thus, these are essentially unknown.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

Capronia capucina is a saprotroph species that has been found growing on bark of living *Nothofagus alpina* and *N. antarctica* (Nothofagaceae), trees from the Andean Patagonian forest of Argentina and Chile. The Nothofagaceae-dominated forests where the species occurs are also populated by *Austrocedrus chilensis*, but the fungal species was not found growing associated with the bark of *A. chilensis* individuals. The area where the fungus occurs is characterised by deciduous forests in a temperate to cold climate with strong westerly winds, frequent snowfall and high annual rainfalls.

Systems: Terrestrial

Use and Trade (see Appendix for additional information)

No use/trade is known.

Threats (see Appendix for additional information)

The threats to the habitat where the fungus is found are; the use of the forest land for housing installations or for cattle raising (the latter decreases the survival of the seedlings), extraction of wood/firewood or soil, invasion of exotic species, increases in forest use for recreation and tourism, more susceptibility to pathogen attack because of alterations in the water dynamics due to climate change, and increasing fires, predominantly in areas close to population centres (e.g. Carabelli and Antequera 2003, Veblen *et al.* 2008, Rodríguez-Cantón *et al.* 2016, Amoroso *et al.* 2017). Also a growing threat to this habitat is climate change, which is of particular concern as Nothofagaceae trees exhibit poor dispersal ability and may not be able to adapt in response to a warming climate (Baldwin *et al.* 2018).

Conservation Actions (see Appendix for additional information)

The main action to prevent the decline of the species is the protection of its habitat, and more specifically of the Nothofagaceae species with which *Capronia capucina* is associated. On the one hand it is important to implement the law established in 2007 for regulating the use of forest land for housing and to ensure that it is being followed. Also, opportunities abound to combine ambitious goals of forest restoration and regeneration with sustainable rural livelihoods and community participation. Although it will not match the composition and structure of the original forest cover, new forests are being regenerated on former agricultural land, and forest plantations are being established for commercial and restoration purposes worldwide (Chazdon 2008).

Further research is also needed to expand our knowledge about the distribution of *C. capucina*, for instance to ascertain whether it is present or not in the Chilean Andean Nothofagaceae forests and also if it occurs below 43° south in the Argentinean Andean forest. Also, it is important to better understand the threats it may face and how they are impacting the population.

Credits

Assessor(s): Sánchez, R.

Reviewer(s): Drechsler-Santos, E., Martins da Cunha, K. & Minter, D.

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External Resources

For [Supplementary Material](#), and for [Images and External Links to Additional Information](#), please see the Red List website.

Appendix

Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate	-	Suitable	-

Plant and Fungal growth forms

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Plant and Fungal growth forms
M. Fungus

Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation	
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation	
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation	
3. Energy production & mining -> 3.2. Mining & quarrying	Ongoing	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects	
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.4. Unintentional effects: (large scale) [harvest]	Ongoing	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation	
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation	
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	-	-

	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	- -
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation

Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Action in Place
In-place land/water protection
Occurs in at least one protected area: Yes

Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Action Needed	Notes
1. Land/water protection -> 1.1. Site/area protection	-
1. Land/water protection -> 1.2. Resource & habitat protection	-
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level	-
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level	-

Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Research Needed	Notes
1. Research -> 1.2. Population size, distribution & trends	-
1. Research -> 1.3. Life history & ecology	-
1. Research -> 1.5. Threats	-

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