

FUNGI ALBANICI

PRELIMINARY RED LIST OF ALBANIAN MACROMYCETES



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MAIN GOALS

- To create the first preliminary red list of Albanian macrofungi,
- to improve fungal conservation status in the country and
- to accelerate proposals for legal measures in order to conserve fungal diversity.



More than 30 localities

National Parks identified as priority areas for both systematic research and conservation

Field work carried out in:

- Tomorri Mountain NP
- Llogora NP
- Prespa NP
- Valbonë Valley NP
- Korab-Koritnik Natural Park
- Fir of Hotova NP
- Shebenik – Jabllanice NP

Current Situation

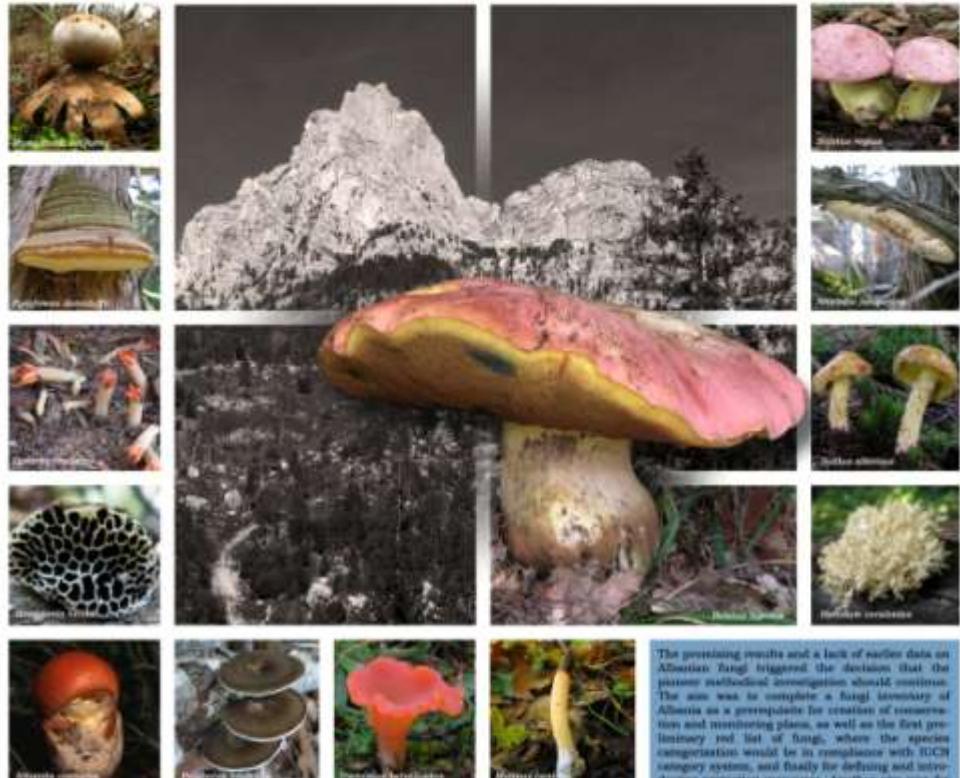
Types of fungi	Families	Taxa genera	Species
Ascomycota (without lichens)	8	17	38
Basidiomycota	34	312	544
Total	42	329	582

3rd International Congress on Fungal Conservation, Turkey, 11-15 November 2013

MYCOLOGICAL CONSERVATION RESEARCH IN ALBANIA

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The preceding results and a lack of earlier data on Albanian fungi triggered the decision that the present publication investigations should continue. The aim was to complete a fungal inventory of Albania and its perspectives for creation of research and monitoring centers, as well as the first preliminary red list of fungi, where the species nomenclature would be in accordance with IUCN category system and finally by defining and introducing protection measures. Areas of the sites were certain areas to be defined and proposed as Important Fungi Areas, using the criteria based on the presence of rare and threatened species, richness and ecological significance of the habitats.



There are very few data on macrofungi in Albania, and in the mycological map of Europe, it is still an uncharted territory. There is no fungi protection legislation despite the fact that huge quantities of mushrooms are exported.

In autumn 2013, the first applied study and review of the fungi in the National Park Prezë, Allona, took place, with the aim of improving management of habitats in the Park. This investigation established a high fungal diversity, and a number of rare, endangered and sensitive species were recorded. Park zones of special significance for fungi were defined.



We have identified National Parks as priority areas for both systematic research and conservation in Albania since the habitats outside of the Parks are damaged, particularly the forest vegetation. In 2013, field work was carried out in Llogara National Park, Peqe National Park, Vajont Valley National Park and Kukës-Kurbinë National Park and some localities outside National parks resulting in records of more than 550 species and some very interesting taxa, such as *Pyrofomes dimidiata*, *Amanita jacksonii*, *Lycoperdon cyathula*, *Bullus vittatus*, *Thaxteria reticulata*, *Psathyrotrichum*, etc. Database of Albanian fungi will be soon available on the website <http://mycofungi.wiki.com/funguslist.htm>



Photos by Ivo Ivančević and Hristo Trajkov
International Mycological Society

kfw Rufford

**Libri i Kuq i Florës
 Shqiptare - Botim I
 Ministrisë së
 Mjedisit, Pyjeve dhe
 Administrimit të
 Ujeravë - Tiranë
 2008**

Albatrellus	pes-capre CR (1b)	(Pukë)
Agaricus	arvensis LR (nt)	Shishtavec (Diber); Shpat (Elbasan); Mali Shenjtë (Mirdite)
Amanita	caesarea LR (nt)	(Tropoje), (Mat), (Mirdite), (Librazhd)
Anthurus	archeri EN (A1b)	Divjakë (Lushnje)
Astraeus	hygrometricus LR (nt)	(Tropoje)
Auricularia	auricula-judae EN (A1b)	Butrint (Sarande); Divjakë (Lushnje)
Boletus	satanas VU (A1b)	Qafa e Qarrit (Korçë)
Calvatia	utriformis LR (nt)	Lividhet e Grabovës (Gramsh)
Clathrus	ruber LR (nt)	Divjakë (Lushnje); Divjakë (Vlore)
Clavariadelphus	truncatus LR (nt)	Fushë Arrëz (Puke)
Gymnosporangium	clavarieforme LR (nt)	Mali I Tejës Gjalicë (Kukës)
Hericium	erinaceus CR (1b)	Ndërfushaz (Mirdite)
Lactarius	volemus LR (nt)	Vermosh (Malesi e Madhe), (Kukës); Bukanik (Elbasan), (Librazhd)
Myriostoma	coliforme LR (nt)	Prespe (Korçë); Divjakë (Lushnje)
Omphalotus	olearius LR (nt)	(Tirane), (Kruje)
Onnia	tomentosa LR (nt)	Vermosh (Malesi e Madhe); Skropatash (Malesi e Madhe)
Ramaria	formosa LR (nt)	Vermosh (Malesi e Madhe); Ulëz (Mat)
Sarcodon	imbricatus LR (nt)	Seferçë (Malesi e Madhe); Shpat (Elbasan); Bozdovec (Korçë), (Tirane)
Sarcoscypha	coccinea LR (nt)	Liqeni Artificial (Tirane); Llogara (Vlore)
Volvariella	bombycina LR (nt)	(Tropoje), (Vlore), (Tirane)

Preliminary Red List of Fungi in Albania

includes **75** species of Ascomycota and Basidiomycota

- Critically Endangered (CR) – 2 species
- Endangered (EN) – 4 species
- Vulnerable (VU) – 17 species
- Near Threatened (NT) – 13 species
- Least Concern (LC) – 4 species
- Data Deficient (DD) – 35 species

Data source used are exsiccates and notes from own studies, as well as data and specimens from other collectors.

Species	IUCN category	IUCN criteria
<i>Antrodia juniperina</i>	CR	C2a(i)
<i>Pyrofomes demidoffii</i>	CR	C2a(i)
<i>Boletus lupinus</i>	EN	D
<i>Hericium erinaceus</i>	EN	B2ab(iii,iv)
<i>Mycenastrum corium</i>	EN	B2ab(iii,iv,v)
<i>Suillus sibiricus</i>	EN	B2a
<i>Albatrellus pes-capre</i>	VU	D1
<i>Amanita caesarea</i>	VU	A2acd
<i>Artromyces pyxidatus</i>	VU	B1ab (iii,iv)
<i>Aureoboletus gentilis</i>	VU	D1
<i>Boletus aereus</i>	VU	A2acd
<i>Boletus impolitus</i>	VU	C1;D1
<i>Boletus regius</i>	VU	C1
<i>Boletus rhodoxanthus</i>	VU	B1ab (i,iii)
<i>Boletus satanas</i>	VU	A1b
<i>Cortinarius bulliardii</i>	VU	B1ab(iii,iv)
<i>Gyromitra infula</i>	VU	A3acd
<i>Hexagonia nitida</i>	VU	A2ac
<i>Myriostoma coliforme</i>	VU	D1
<i>Phellinus robustus</i>	VU	A2ac
<i>Pluteus umbrosus</i>	VU	D1
<i>Tremiscus helvelloides</i>	VU	A2ac
<i>Tricholoma acerbum</i>	VU	B2a

Prespa National Park



ANTRODIA JUNIPERINA : CR - C2a(i)

Known from East Africa (Ethiopia, Kenya, and Tansania) as a parasite and saprobe on thick trunks of *J. procera*. In the USA it grows on *J. deppeana*, *J. monosperma*, *J. osteosperma*, and *J. virginiana*. In Europe, it is known from Spain on *J. thurifera*, and in the Balkan Peninsula and Turkey on *J. excelsa*. In AL it grows as a saprobe, rarely parasite on old trunks of *J. excelsa*.



Pyrofomes demidoffii : CR - C2a(i)

Dangerous parasite on various Juniper spp. in East Africa and North America. Known from Caucasus, Uzbekistan, Siberia, and Crimea mostly on *Juniperus* spp. but also on *Cupressus*. In the Balkan Peninsula, Pyrofomes demidoffii is collected only on *J. excelsa*.



HEXAGONIA NITIDA : VU – A2ac



Suillus sibiricus ssp. *helveticus* : EN - B2a



Suillus sibiricus subsp. *helveticus* is exclusively mycorrhizal with five needles pines (*Pinus cembra*, *P. peuce*, *P. strobus*) in Europe. It is one of 33 threatened fungi in Europe - candidates for listing in Appendix I of the Bern Convention

National lists of endangered fungi (*Combined European Fungal Red lists*):

Austria	EN
Bulgaria	EN
Germany	EN
Poland	EN
Slovakia	VU
Switzerland	/

(Bankert et al. 1992, Wojewoda & Ławrynowicz 1992, Gyosheva et al. 2000, Lizoň 2001)

Boletus lupinus: EN - D



Boletus satanas: VU - A2ac



Boletus regius : VU - C1





Myriostoma coliforme : VU– D1

Pisolithus arrhizus : NT



Amanita caesarea VU - A2acd



Boletus aereus : VU - A2acd



Boletus reticulatus



Hericium erinaceum : EN - B2ab(iii,iv)



Hericium coralloides - NT



Clathrus ruber: NT



LLOGORA PARK PYJOR KOMBETAR

FONDI PYJOR FAUNISTIK:

SIPERFAQA
PISHË E ZEZË
BREDH
HALORË TË TJERË
PANJ
FLETORË TË TJERË
BUSH
TE TJERE SHKURRE
SIPERFAQE JO PYJORE 204 "

1010 Ha	KAPROLLI
248	DERRIEGER
328	UJK
99	LEPUR
20	DHELPER
44	KETER
59	"
8	"



Phelodon niger - NT



Sarcodon glaucopus - NT





Parku Kombëtar i Luginës së Valbonës



Tremiscus helvelloides – VU (A2ac)

Gyromitra infula – VU (A3acd)



The background of the image is a dramatic sky at sunset or sunrise. The upper portion of the sky is filled with dark, heavy clouds, while the lower portion is illuminated by a bright, warm glow of orange and yellow. This light filters through the clouds, creating streaks of color and highlighting the edges of the clouds. The overall mood is one of tranquility and beauty.

Thank You...