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of Fungi**

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Contents:

- Introduction**, by *Régis Courtecuisse* (p.2)
ECCF Forum now a mailing-list, 24 Jun 1999, by *Régis Courtecuisse* (p.3)
News from Estonia, by *Erast Parmasto* (p.3)
Short report from Lithuania, 14 September 1999, by *Ernestas Kutorga* (p.3)
Briefly from Armenia, by *Siranoush Nanagulyan* (p.4)
Report about inventory, mapping and protection of Fungi in Belgium, by *André Fraiture* (p.4)
A preliminary red list of macromycetes in the Republic of Macedonia, by *Mitko Karadelev* (p.7)
Fungi conservation in Jugoslavia, 23 september 1999, by *Boris Ivancevic* (p.11)
List of threatened Macrofungi in Greece, by *Stephanos Diamandis* (p.12)
XIII CEM & ECCF Meeting – Report, by *Claudia Perini* (p. 14)
[including informations on the relations with Bern Convention and IUCN]
References List (p. 17)
New contacts, changed addresses, phones, emails & so on (p.18)

Introduction

Régis Courtecuisse

As you will see from the next few pages, the long silence since the last issue of our Newsletter was justified by some changes in our Executive Committee, and by heavy work involving important topics, such as the relations with Bern Convention or the IUCN.

Fortunately, Claudia did a great job (congratulations and thanks for her help), as usual, in achieving a draft issue, widely facilitating my own job and the publication itself.

Opening this issue, as a new chairman of the ECCF, I would like to stress very briefly our priorities (at least as I see them) for the next future (the details for each of these points will be developed in specific chapters below) : we have to 1) strengthen and develop our relations with other conservation entities, such as Planta Europa, IUCN, Bern Convention and others, 2) develop specific research programs and establish researcher groups within our members, considering for example the mapping of endangered european species or preparing a formal check-list of Fungi occurring in our area (Europe covers a huge and extremely diverse continent, this leading to great difficulties in conducting such a collective task), 3) popularize the crucial role of Fungi in our environment (especially toward nature conservationists) and the importance of preserving the fungal biodiversity as far as possible for the benefit of ecosystems, globally, 4) develop research around fungal bioindication of environmental quality and any topic related to the use of Fungi as indicators of environmental parameters, 5) stimulate the participation of more mycologists from all European countries (some progress may be noticed, especially from Eastern Europe but it is still necessary to improve our group). What I can also stress is the fact that we are all overcharged with work and responsibilities, since field-workers (ecologists and taxonomists) are themselves threatened (sometimes with extinction) and that the major increase of work to be done in this field is to be processed by less and less people. As a consequence, we need to build efficient networks, to share the weight of responsibilities and to collaborate in collective research activities. Our future (and hence the future of Fungi and Nature, which we fight for) depends on some changes in our mind, avoiding selfish or national behaviour or way of thinking. We must share past, present and future knowledge and experience around the environmental role of Fungi and fungal conservation

May I also remind you that using our electronic mailing-list (see just below) will facilitate contacts and give excellent opportunities to keep in touch, exchanging quickly and efficiently ideas, data, knowledge. Addressing any message to <eccf@seiti-lists.univ-lille2.fr> will make you sure that you instantly reach all the registered colleagues. Let me insist on the importance of registering yourself in this mailing-list, for the future and efficiency of our Council.

This paper-formatted Newsletter will still be useful, at least as long as some of us have no mail-facilities. We will still produce it in the future. But probably e-communication should also be developed and generalized among ECCF members.

I do hope that the next years will see new developments in any of these topics and will produce lots of further knowledge around fungal conservation, leading to a better consideration of fungal diversity in Nature conservation and management.

ECCF Forum now a mailing-list
24 June 1999, by *Regis Courtecuisse*

Our ECCF Forum was so quiet for a while that I think it is almost something like a death for it....So, I decided, after a suggestion and with the help of my computer friend Pierre Ravaux (Lille 2 University), to turn our Forum into a mailing-list. The main difference is that every new message will be automatically forwarded to your personal mailboxI do hope that this new disposal will make our discussions start again.

What you have to do, now, is to register yourself to this new mailing-list. It is very simple and easy. You just have to visit the following URL :
<<http://seiti-lists.univ-lille2.fr/mailman/listinfo/eccf>>
and follow the instructions for registering.

Once registered, you will receive directly each message sent to the list, you will also be enabled to check the Archives of the list and to see the list of registered colleagues. It is also possible to process you own account and change anything in your registration system.

NEWS FROM ESTONIA by *Erast Parmasto*

The second fascicle of the "Distribution maps of Estonian Fungi" with maps of 91 fungal species included in the Estonian Red Data Book and /or protected by law is published. As in the first fascicle (published 1993), all maps are presented in two versions: as large maps based on 10 x10 km international UTM grid and as small maps based on 50 x 50 km UTM grids as used in the "Atlas Florae Europaeae" and in most of distribution mapping of European plants and animals.

The distribution maps will be published irregularly in the form of fascicles of unbound sheets; this will enable users to arrange the maps to their needs.

SHORT REPORT FROM LITHUANIA 14 September 1999, by *Ernestas Kutorga*

The inventory of fungi of Lithuania is going on. We continue to publish data on species in multivolume edition of "*Mycota Lithuania*". The manuscript of "Checklist of macrofungi and lichens of Lithuania" is compiled.

The Commission of Lithuanian Red Data Book publishes annually the booklets "Red sheets" (*Raudonieji lapai*), in which new localities of fungal species included in the Red data Book (1992) are reported. New edition of the book is planned for 2000-2001.

We are looking forward to participating in ECCF project "Mapping of threatened fungi in Europe". It would be a good stimulus to start mapping and databasing of all Lithuanian fungi.

The Mycological Society of Lithuania was created in 1998. Its aims are to promote investigations, teaching, management and conservation of Lithuanian Fungi. Ca. 20 persons are members of this society at the moment. Several thousand visitors visited the exhibition of Fungi and Lichens organized by the Society in Vilnius in September, 1998.

BRIEFLY FROM ARMENIA

by *Siranoush.Nanagulyan*

Although the Republic of Armenia consists of a small territory, there are some rare and threatened species of macrofungi. Unfortunately, in Red Book of Armenia none of the fungal species was included. Now I am compiling the Database of macrofungi of Armenia and I am working on projecting of Red List to consist republished Red Book of Armenia.

REPORT ABOUT INVENTORY, MAPPING AND PROTECTION OF FUNGI IN BELGIUM

André Fraiture

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1. Inventory of the mycoflora

The Brussels Region is a partly autonomous territory composed of the City of Brussels and a part of the suburbs. About 1.000.000 persons are living on that small territory (± 160 km²), but the biodiversity is surprisingly high, due to the presence of a lot of "green spaces" and even of some pieces of woodland. In 1990, the Brussels Region decided to start a study on the biodiversity of its territory. Programs were initiated for the inventory of higher plants, urban (planted) trees, fungi, amphibians and reptiles, birds and mammals, including bats. In what concerns the fungi, several reports have already been published (Schreurs 1996, De Kesel 1996, 1998a, 1998b, Vanholen & De Kesel 1999). The data have been collected by consulting the literature, the herbaria and several unpublished manuscripts (collecting notebooks, ...). Field work has also been performed, with periodical relevés in permanent plots. Several mycological societies have cooperated by organizing forays in the studied territory.

At the present state of the inventory, the list of the mycoflora of the Brussels Region enumerates 1,130 species. Cluster analysis has shown a clear relation between human activity, ruderalization and poor quality of the mycoflora in the different plots. In the Forêt de Soignes, the richest plots are situated in natural reserves protected by fences.

An inventory of the mushrooms of the province Limburg has also been realized. It will be published in the next future.

2. Data banks

In Belgium, there is no national mycological society. We have ten local mycological societies (in Antwerpen, Gent, Leuven, the Limburg province, Bruxelles, Liège, Namur, Charleroi, Mons and Neufhâteau). The Vlaamse Mycologische Vereniging has been created a few years ago to try to unit all the dutch speaking mycologists, but the local societies were not suppressed and are still very active. Three of those Belgian mycological societies have now their own data bank for the keeping and treatment of mycological data. All of those data banks are turning on ACCESS, but each with a different software.

In addition, the Jardin Botanique National de Belgique (BR) started, about 10 years ago, to register in a databank all the data concerning the specimens preserved in the

mycological herbarium. This program (created and managed by Alain Drèze) is turning on PROGRESS. At present, more than 100,000 specimens have been registered, from a total of about 150,000 specimens. A summary of that data bank can be consulted on our website, at the following URL:

<<http://www.br.fgov.be/RESEARCH/COLLECTIONS/HERBARIUMS/FUNGI/SURVEY/index.html>>

At present, the different Belgian mycological data banks contain: Funbel (KAMK, Antwerpen): 207,000 data, BR (National Botanic Garden, Meise): 100,000 data (only 39,000 concerning Belgium), MYCOLIM (prov. Limburg): more than 70,000 data. If we add a few smaller databases, the total number of data is now approaching 350,000. Large amounts of data, both published and unpublished, remain to be computerized.

So, the biogeographical and ecological data about mushrooms are abundant but still dispersed, in Belgium. Contacts have been initiated, from the beginning of 1999, to try to make the data banks fully compatible. Some other database creators have been invited to participate: Y. Barbier & P. Rasmont (Microbanque Faune-Flore, Carto Fauna-Flora) and A. Delannoy (ADELE, software used for the registration and management of the mycological data in France).

3. Mapping

Some distribution maps have been published, since our last Meeting. They are dispersed in several publications, among which papers on *Lactarius* (Verbeken *et al.*, 1997, 1998, 1999) and *Pycnoporus* (Thoen *et al.*, 1999).

"Carto Fauna-Flora" is a software designed by Y. Barbier and P. Rasmont (Université de Mons-Hainaut) to draw distribution maps. It can be used alone or coupled with "Microbanque Faune-Flore" (same designers), which is a software for the management of a data bank concerning bio-geographical data.

4. Red lists

Until recently, we had no Red List for Fungi in Belgium. But the Flemish Region (northern part of Belgium) decided to study the evolution of its mycoflora. The work is now finished and will be published before the end of the year (Walley & Verbeken, 1999). Only some groups of macrofungi were taken into account. The 552 concerned species belong to the Ascomycetes (Geoglossaceae s.l., *Poronia* and many fleshy Pezizales) and Basidiomycetes (Amanitaceae, Hygrophoraceae, *Tricholoma*, *Collybia* s.l., *Marasmius* s.l., Russulaceae, Boletales, Pleurotaceae, Cantharellaceae, hydroid fungi and epigeous Gasteromycetes). The total number of collected data amounts about 90,000, most of them have been extracted from different databases: Funbel (KAMK), Mycolim (Likon) and the BR and GENTherbaria.

The frequency of the species is calculated for the periods "up to 1985" and "1986-1997" and corrected according to the number of visited squares in both periods. The Red List categories are based on frequency of the species, trend of this frequency and partly also on the degree of dependency of the species upon endangered habitats.

On the 552 studied species, 43 are considered as "extinct in the area", 46 as "critically endangered", 66 as "endangered", 118 as "vulnerable", 35 as "susceptible" (rare), 26 as "indeterminate" (probably endangered), 6 as "near-threatened", 187 as "safe" and 25 as "insufficiently known" (recently described species or taxonomically problematic taxa). The decline of the mycoflora is a widespread phenomenon in the studied area. It is more pronounced for the ectomycorrhizal species (32% "safe") than for the saprophytic species (40% "safe"). The species of poor grasslands, coniferous forests, marshes, peat

bogs, wet heathlands, coastal dunes and most of the forest types are threatened. Numerous ectomycorrhizal fungi seem to have now disappeared from the forests, probably mainly due to the heavy eutrophication of the soils. They still only survive now on poor grassy road sides or in parks, what makes necessary the conservation of these biotopes and their adequate management. Other measures suggested for the conservation of threatened macrofungi are to protect biotopes containing a high number of endangered species, to leave more dead wood on the forest floor, to burn more frequently in situ the remains of wood after the cuttings and to plant indigenous trees instead of "exotic" species.

The changes in the mycoflora in Flanders show great similarities with the evolution observed in other European countries. More particularly, the area has a large number of endangered species and biotopes in common with the Netherlands. This is not surprising given that the biotopes, climate, soils, ... are very similar in Flanders and in The Netherlands.

5. Protection of fungi

Belgium has now a federal structure and the protection measures are different from one region to the other. In Flanders, the recent "Bosdekret" is very strict. Any kind of picking is prohibited. We hope that the new Red List will allow a better protection to the most interesting sites. In Wallonia, the picking is controlled. In the Brussels Region, after the work of inventory, propositions have been made to give a better protection to the mycoflora. One of the proposed measures is a prohibition of picking mushrooms for commercial purposes ; another is to make restrictions for other mushroom picking (for example, maximum one kg per day and per person). It seems that the authorities will follow those suggestions.

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**A PRELIMINARY RED LIST OF
MACROMYCETES IN THE REPUBLIC OF MACEDONIA**
by **Mitko KARADELEV**

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ABSTRACT

A list of recorded macromycetes of Macedonia published up to now in scientific papers, has been used as a working inventory. The authors' personal, unpublished data were also used. Concurring with recent efforts to catalogue the mycofund and in accordance with the knowledge about rare and threatened species in Europe, it becomes possible to select some species important for protection and conservation. For this reason, a provisional list of macromycetes has been made. The preliminary Red List is an open working document aimed at offering a definite estimation. A total of 67 species have been put in the list of potentially endangered macromycetes in Macedonia. All the included species are Basidiomycetes.

Key words: Macromycetes, Red List, the Republic of Macedonia

Introduction.

In Macedonia not much systematic research on fungi has been done up to now, and the data of macromycete distribution are rather scarce. In total 707 species of macromycetes have been reported from the territory of the Republic of Macedonia. Only 43 of them belong to the class of Ascomycetes. Among Basidiomycetes 353 species belong to Aphyllophorales s.l., and 273 to Agaricales s.lato (including Boletaceae and Russulaceae). The rest are Gasteromycetes and some smaller groups: Auriculariaceae, Tremellaceae, Tulasnellaceae and Dacrimycetaceae.

Tab. 1 Review of species macromycetes according to taxonomical categories (classes and orders)

Class	No. of species
<i>Ascomycetes</i>	43
<i>Basidiomycetes</i>	664
Total	707

Orders from <i>Basidiomycetes</i>	No. of species
<i>Aphyllophorales</i>	353
<i>Agaricales</i>	273

<i>Gasteromycetales</i> and others	38
Total	664

Results and discussion.

The list of all recorded species so far in scientific publications (Tortic, 1988; Karadelev, 1993, 1998) has been used as a working inventory of the existing macromycetes species on the territory of MK, with the assumption that the same species are found nowadays as well in the area, regardless of the obsolete data. Approximately a hundred species have also been added to the list. In the final forming of the list, the species satisfying the following criteria have been considered:

- Species included in the European Red List (Ing 1993), and which are rare or endangered in MK.
- Species not included in the European Red List, but rare or endangered in MK.
- Rare and important species confined to endangered types of ecosystems i.e. substrates.

The species categorisation in compliance with the classic IUCN category system could not have been entirely applied because the region is insufficiently investigated.

Therefore, the author has made his own categorisation. The categorisation of species endangerment comprises three degrees, and these are:

- A particularly rare or rare species in Macedonia.
- A species existing only in endangered or rare habitats.
- A particularly rare or rare species, endangered due to excessive exploitation.

The rare and endangered introduced species (mycorrhizal fungi on non-autochthonous trees) have not been taken into account.

In comparison with the other European countries, the situation is as follows. Arnolds (1995) gives a list of species from the Red Lists by countries. Thus, in Austria 211 species have been proposed, in the Czech Republic 123 species, Denmark 898, Finland 161, Germany 1,400, Great Britain 445, the Netherlands 944, Norway 649, Poland 1,013, and Sweden 515. Ivancevic (1995) proposes 97 species for the Preliminary Red List of Yugoslavia, whereas Tkalec, Z., Matocec, N., Mesic, A. & Tortic, M. (1997) propose 130 species for Croatia.

Tab. 2 List of fungal species (Basidiomycetes) proposed for protection in the Republic of Macedonia

Species	MAK	ERL
<i>Agaricus macrosporus</i> (Moll. & J.Schaef.) Pil.	EKSP	
<i>Amanita caesarea</i> (Scop.: Fr.) Pers.	EKSP	D
<i>Amanita vitadinii</i> (Moretti) Vittad.	RV	
<i>Amylostereum areolatum</i> (Chaill.in Fr.) Boid.	RS	
<i>Antrodia juniperina</i> (Murril) Niemelä et Ryv.	RS	
<i>Apoxona nitida</i> (Dur.et Mont.) Donk	RS	
<i>Armillariella tabescens</i> (Scop.: Fr.) Sing.	EKSP	
<i>Basidioidendron caesiocinereum</i> (v.Hohn.et Litsch.) Luck	RV	

<i>Battarea phalloides</i> (Dicks.) : Pers.	RS	D
<i>Boletus aereus</i> Bull.: Fr.	EKSP	C
<i>Boletus fechtneri</i> Velen.	EKSP	B
<i>Boletus pulverulentus</i> Opat.	RV	
<i>Boletus regius</i> Krombh.	EKSP	A
<i>Boletus rhodoxanthus</i> (Krombh.) Kallenb.	RV	A
<i>Boletus satanas</i> Lenz	EKSP	A
<i>Chroogomphus helveticus</i> (Sing.) Mos.	RS	
<i>Clathrus ruber</i> Mich.: Pers.	RV	
<i>Craterellus cornucopioides</i> (L.) Fr.	EKSP	
<i>Creolophus cirrhatus</i> (Pers.: Fr.) P.Karst.	RV	
<i>Dichomitus albidofuscus</i> (Domanski) Domanski	RV	
<i>Diplomitoporus flavescens</i> (Bres.) Domanski	RV	
<i>Exidia pithya</i> Fr.	RS	C
<i>Gestrum minimum</i> Schw.	RV	
<i>Gloeocystidiellum ochraceum</i> (Fr.: Fr.) Donk	RV	
<i>Gloeoporus dichrous</i> (Fr.) Bres.	RV	D
<i>Hericium erinaceus</i> (Bull.: Fr.) Pers.	RV	B
<i>Heterochaetella dubia</i> (Bourd.et Galz.) Bourd. Et Galz.	RV	
<i>Hirneola auricula judae</i> (Bul.: St.Am.) Berk	RV	
<i>Hygrocybe reai</i> R.Mre.	RV	
<i>Hygrophorus marzuolus</i> (Fr.) Bres.	EKSP	D
<i>Hyphoderma pallidum</i> (Bres.) Donk	RV	
<i>Inonotus tamaricis</i> (Pat.) Maire	RS	
<i>Lachnellula suecica</i> (de Bary : Fuck.) Nannf.	RV	
<i>Langermania gigantea</i> (Batsch.) Rostk	RV	
<i>Leptosporomyces galzinii</i> (Bourd.) Jülich	RV	
<i>Lindtneria chordulata</i> (D.P.Rogers) Hjortstam	RV	
<i>Macrolepiota procera</i> (Scop.: Fr.) Sing.	EKSP	
<i>Metulodontia nivea</i> (Karst.) Parmasto	RV	
<i>Mutinus caninus</i> (Huds.: Pers.) Fr.	RV	
<i>Mycoacia nothofagi</i> (G. Cunn.) Ryvarden	RV	
<i>Mycoaciella bispora</i> (Stalpers) Erikss.et Ryv.	RV	
<i>Myriostoma coliforme</i> (With.: Pers.) Corda	RV	
<i>Parmastomyces krawtzevianus</i> (Bond.et Par.) Kotl.et Pouz.	RV	
<i>Paxilus atrotomentosus</i> Schwalb.	RV	
<i>Peniophora junipericola</i> J.Erikss.	RS	
<i>Peniophora tamaricicola</i> Boidin & Malencon	RS	
<i>Perenniporia narymica</i> (Donk) Ryv.	RV	
<i>Phanerochaete martelliana</i> (Bres.) Erikss.et Ryv	RV	
<i>Phellinus rimosus</i> (Berk.) Pilat	RV	
<i>Phellinus robustus</i> (P.Karst.) Bourd.et Galz.	RS	
<i>Phlebia griseo-flavescens</i> (Litsch.) Erikss.et Hjortst.	RV	

<i>Pleurocybella porigena</i> (Pers.: Fr.) Singer	RS	
<i>Pleurotus dryinus</i> (Pers.) Kumn.	RV	
<i>Poronia punctata</i> Fr.	RV	
<i>Porostereum spadiceum</i> (Boidin) Ryv.	RV	
<i>Pyrofomes demidoffii</i> (Lev.) Kotl.et Pouz.	RS	
<i>Rigidoporus undatus</i> (Pers.) Donk	RV	
<i>Sarcodon imbricatus</i> (L.: Fr.) Karst.	RV	
<i>Sarcoporia salmonicolor</i> (Berk.et Kurt.) Doman.	RV	
<i>Steccherinum litschaueri</i> (Bourd.et Galz.) Berk.& Kurt.	RV	
<i>Suillus sibiricus</i> (Sing.) Sing.	RS	
<i>Trametes ljubarskii</i> Pilát	RV	
<i>Tremella foliacea</i> Pers.: Fr.	RV	
<i>Tulostoma brumale</i> Pers.: Pers.	RV	
<i>Tulostoma melanocyclum</i> Bres. in Petri	RV	
<i>Utathobasidium ochraceum</i> (Masse) Donk	RV	
<i>Volvariella bombycina</i> (Sch.: Fr.) Singer	RV	

MAK

EKSP - especially rare or rare species in Macedonia; RV - species existing in endangered or rare habitats; RS - especially rare or rare species in Macedonia, endangered because of excessive exploitation

ERL - species from European Red List

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FUNGI CONSERVATION IN JUGOSLAVIA

23 september 1999, by *Boris Ivancevic*

After Vipiteno meeting and ECCF letter with recommendations for desirable conservation measures for the countries where mushrooms are gathered for commercial purposes on a large scale, we mycologists have tried to modify the existing and inadequate fungi conservation regulation in Yugoslavia. The proposal offered by my colleagues and myself included keeping a detailed evidence of the mushrooms gathered and different measures for limiting excessive mushroom picking. On the basis of this, the Ministry of Environment Protection passed in 1999 a new regulation, but unfortunately, of all our suggestions, the only one accepted was an extended list of the species for which a tax ought to be paid to the Ministry if they are gathered for commercial purposes.

In addition to the foregoing one, another regulation for the conservation of rare and endangered species is being prepared. It will impose a ban on gathering these species and prescribe conservation of habitats where this fungi occur. About a hundred species cited in this regulation are basically the ones from "The preliminary YU Red List" with very few changes. The regulation was to be enacted in spring 1999, but this was postponed due to the wellknown events in Yugoslavia from March till June. Because of the devastating consequences of those events and the chaos in all social functions, almost all conservation and scientific activities in general have been suspended or reduced to the minimum.

The destroying of Yugoslav economy has drastically increased pressures on the basic natural capital, particularly forests, which are ruthlessly cut and wood is being imported to Western Europe. Because of the destroyed heating plants, petrol and electric-power industry, wood will be the main source for heating in the oncoming winter. The destruction of forests has immediate effects on the fungi which inhabit them. There is almost no control any more over gathering and sale of mushrooms, and in Kosovo region, where the largest quantities used to be gathered for import, there is no way of finding out what is going on.

In the march-june period, nature in Yugoslavia was polluted by dangerous substances on a large scale, from destroyed factories of base chemicals and petrol oil industry. Unknown quantities of depleted uranium from the missiles are scattered over the territory of Yugoslavia, mostly on Kosovo region. All this highly toxic substances are bound to be found in the organism of edible mushrooms. Unfortunately, it is impossible to monitor and study changes.

In a situation like this, when we are probably facing further diminishing of Yugoslav territory, the efforts on fungi conservation are strenuous and support is needed from abroad to conserve fungi and all nature in some measure in this part of Europe as well.

LIST OF THREATENED MACROFUNGI IN GREECE

by *Stephanos Diamandis*

N.Ag.Re.F.-Forest Research Institute, 570 06 Vassilika, Greece

Only in 1973 M. Pantidou published the first Catalogue of fungi in Greece. Since then a significant number of papers on recording the mycoflora have been published.

The Forest Research Institute has elaborated a database which includes over 11,000 records. As there are no past records it is impossible to name extinct fungal

species and rather risky to state threatened ones. After the ECCF Meeting in Vipiteno, I started writing a Red Data book for the Greek Mushrooms which I hope to have ready at the end of 2000. There is no specific legislation in Greece for the conservation of threatened or rare mushrooms. I am in touch with Claudia Perini asking for legislation in other countries so to forward all the administrative actions to impose relevant legislation.

The following list includes: 6 species which I consider as threatened because of habitat loss or other reasons marked with (1) and 144 rare species, which over my 20 years of collecting experience I have collected only 1 to 3 times all over Greece. These are marked with (2).

Threatened (1)

- | | |
|------------------------------|---------------------------------|
| 1. <i>Boletus versicolor</i> | 4. <i>Mutinus caninus</i> |
| 2. <i>Cyathus striatus</i> | 5. <i>Myriostoma coliformis</i> |
| 3. <i>Hericium erinaceus</i> | 6. <i>Tricholoma caligatum</i> |

Rare (2)

- | | |
|--|---------------------------------------|
| 1. <i>Agaricus haemorrhoidarius</i> | 32. <i>C. melinus</i> |
| 2. <i>A. vaporarius</i> | 33. <i>C. splendens</i> |
| 3. <i>Albatrellus pre-carpae</i> | 34. <i>Galerina paludosa</i> |
| 4. <i>Amanita ceciliae</i> syn. <i>A. inaurata</i> | 35. <i>Geastrum fornicatum</i> |
| 5. <i>A. echinocephalum</i> | 36. <i>Grifola frondosa</i> |
| 6. <i>A. mairei</i> | 37. <i>Gyromitra gigas</i> |
| 7. <i>A. porphyria</i> | 38. <i>G. infula</i> |
| 8. <i>A. vittadinii</i> | 39. <i>Hydnellum caeruleum</i> |
| 9. <i>Boletus fragrans</i> | 40. <i>Hygrocybe langei</i> |
| 10. <i>B. impolitus</i> | 41. <i>H. psittacina</i> |
| 11. <i>B. porosporus</i> | 42. <i>H. spadicea</i> |
| 12. <i>B. rhodopurpureus</i> | 43. <i>H. strangulata</i> |
| 13. <i>B. rubinellus</i> | 44. <i>H. virginea</i> |
| 14. <i>Calocybe cerina</i> | 45. <i>H. camarophyllus</i> |
| 15. <i>Cerocorticium molare</i> | 46. <i>H. chrysapsis</i> |
| 16. <i>Clitocybe herbarum</i> | 47. <i>H. ligatus</i> |
| 17. <i>C. hydrogramma</i> | 48. <i>H. penarius</i> |
| 18. <i>C. metachroa</i> | 49. <i>H. subradicatus</i> |
| 19. <i>Collybia distorta</i> | 50. <i>H. unicolor</i> |
| 20. <i>Conocybe lactea</i> | 51. <i>Hymenochaete rubiginosa</i> |
| 21. <i>C. tenera</i> | 52. <i>Inocybe lacera</i> |
| 22. <i>Coprinus romagnesianus</i> | 53. <i>I. serotina</i> |
| 23. <i>C. varians</i> | 54. <i>Inonotus dryadeus</i> |
| 24. <i>C. velox</i> | 55. <i>Lactarius azonites</i> |
| 25. <i>C. xanthotrix</i> | 56. <i>L. controversus</i> |
| 26. <i>Cortinarius calochrus</i> | 57. <i>L. insulsus</i> |
| 27. <i>C. cotoneus</i> | 58. <i>L. torminosus</i> |
| 28. <i>C. crocofoleus</i> | 59. <i>Lentinellus flabelliformis</i> |
| 29. <i>C. crocolitus</i> | 60. <i>Lentinus lepideus</i> |
| 30. <i>C. cyanites</i> | 61. <i>Lepiota ignivolvata</i> |
| 31. <i>C. elatior</i> | 62. <i>Leucopaxillus mirabilis</i> |

- | | |
|------------------------------------|--|
| 63. <i>L. giganteus</i> | 104. <i>Rhodophyllus cetratus</i> |
| 64. <i>Lyophyllum conatum</i> | 105. <i>Rigidoporus sanguinolentus</i> |
| 65. <i>L. semitale</i> | 106. <i>Russula deusifolia</i> |
| 66. <i>Marasmius wynnei</i> | 107. <i>R. grisea</i> |
| 67. <i>Mycena adonis</i> | 108. <i>R. lutea</i> |
| 68. <i>M. maculata</i> | 109. <i>R. mairei</i> |
| 69. <i>M. olida</i> | 110. <i>R. nitida</i> |
| 70. <i>M. picta</i> | 111. <i>R. sanguinea</i> |
| 71. <i>M. praecox</i> | 112. <i>Sarcodon imbricatum</i> |
| 72. <i>M. viscosa</i> | 113. <i>S. scabrosus</i> |
| 73. <i>Omphalina ericetorum</i> | 114. <i>Scleroderma areolatum</i> |
| 74. <i>Onnia tomentosa</i> | 115. <i>S. verrucosum</i> |
| 75. <i>Panaeolina foenicicii</i> | 116. <i>S. pythiophila</i> |
| 76. <i>Panaeolus ater</i> | 117. <i>Skeletocutis nivea</i> |
| 77. <i>P. semiovatus</i> | 118. <i>S. percandida</i> |
| 78. <i>Panus tigrinus</i> | 119. <i>Sparassis crispa</i> |
| 79. <i>Phallus hadrianii</i> | 120. <i>Spathularia flavida</i> |
| 80. <i>Pholiota alnicola</i> | 121. <i>Stereum rugosum</i> |
| 81. <i>P. astragalina</i> | 122. <i>S. rameale</i> |
| 82. <i>P. gummosa</i> | 123. <i>Suillus abietinus</i> |
| 83. <i>P. lenta</i> | 124. <i>S. alboflocculosus</i> |
| 84. <i>P. lubrica</i> | 125. <i>S. alkaliaurantians</i> |
| 85. <i>P. mixta</i> | 126. <i>S. bellini</i> |
| 86. <i>Pleurotus lignatilis</i> | 127. <i>S. boudieri</i> |
| 87. <i>P. salignus</i> | 128. <i>S. leptopus</i> |
| 88. <i>Pluteus curtesii</i> | 129. <i>S. mediterraneus</i> |
| 89. <i>P. ulmarius</i> | 130. <i>S. plorans</i> |
| 90. <i>Psathyrella prona</i> | 131. <i>S. roseovelatus</i> |
| 91. <i>P. spintrigera</i> | 132. <i>Trametes multicolor</i> |
| 92. <i>Psilocybe semiglobata</i> | 133. <i>T. trogii</i> |
| 93. <i>Pycnoporus cinnabarinus</i> | 134. <i>Tricholoma gausapatum</i> |
| 94. <i>Ramaria fennica</i> | 135. <i>T. pardinum</i> |
| 95. <i>R. fumigata</i> | 136. <i>T. populinum</i> |
| 96. <i>R. gracilis</i> | 137. <i>T. sulfureum</i> |
| 97. <i>R. invalii</i> | 138. <i>T. virgatum</i> |
| 98. <i>R. largentii</i> | 139. <i>T. hartigii</i> |
| 99. <i>R. sticta</i> | 140. <i>Xerocomus armeniacus</i> |
| 100. <i>Resupinatus applicatus</i> | 141. <i>X. badius</i> |
| 101. <i>R. silvanus</i> | 142. <i>X. spadiceus</i> |
| 102. <i>Rhodocybe mundula</i> | 143. <i>Xylaria longipes</i> |
| 103. <i>R. nitellina</i> | 144. <i>X. polymorpha</i> |

XIII CEM & ECCF Meeting – Report
by *Claudia Perini*

[including informations on the relations with Bern Convention and IUCN]

At the last XIII CEM, held at Alcalá de Hénare's University (Madrid, Spain), from 21st to 25th september, 1999, our Council had the possibility to organize a special meeting thanks to the kind help of the Congress Secretariat. Some important decisions taken and points discussed are here shortly reported.

Participants at the ECCF Inter-meeting (24th september 1999) during the XIII CEM:

Vladimir Antonin (CZ)	(on behalf of J. Baptista-Ferreira, PT)
Eef Arnolds (NL)	Marijke Nauta (NL)
Miroslav Beran (CZ)	
Anders Bohlin (SE)	Maria Nuñez
Régis Courtecuisse (F)	(on behalf of E. Bendiksen & T.-E. Brandrud, N)
Shelley Evans (U.K.)	
André Fraiture (B)	Esteri Ohenoja (FIN)
Leo Jalink (NL)	Peter Otto (D)
Kirko Karadelev (MR)	Erast Parmasto (EE)
Heikki Kotiranta (FIN)	Ursula Peintner (A)
Maria Lawrynowicz (PL)	Claudia Perini (I)
Pavel Lizon (SK)	Maurice Rotheroe (U.K.)
Xavier Llimona	Alina Skirgiello (PL)
(on behalf of N.P.Martin, E)	Ioanna Theochari
Guy Marson (L)	(on behalf of Diamandis, GR)
Irenea Melo	

- Prof. Maria Lawrynowicz opened the meeting with a welcome speech.
- Claudia Perini brought the greetings, among others, from Kraigher (involved in a meeting held in Slovenia), Nanagulian, Kutorga and Ivancevic (sending the report of their activities), then she summarized the ECCF activities during the period 1995-99 (all reported in the last Newsletters and 1998 Vipiteno Proceedings).
- Three years had passed and a new election was necessary: Régis Courtecuisse was proposed by Maria Lawrynowicz as the new Chair. Régis explained that since he was overbooked by work he would prefer not to accept, because he would not be able to be very active. Maurice Rotheroe, Marijke Nauta, Eef Arnolds, Béatrice Senn-Irlet and André Fraiture, were suggested as possible candidates, who neither had a stable position nor an Institution behind them. Pavel Lizon thought that a change of the chair can not be accompanied by changes of the secretariat. The reality of a series of activities going on inside the ECCF induced Claudia Perini to propose to form working groups and to enlarge the Executive Committee. In fact in the past period just one "specialized group" formed by Esteri Ohenoja and Peter Otto follows the proposed European Mapping project, while the "Bern convention" and "IUCN" activities and contacts were realized by Régis Courtecuisse and Claudia Perini.
- Finally the decision was: Régis Courtecuisse (Chairman), Claudia Perini (Secretary), Peter Otto (European Mapping Group), Heikki Kotiranta (IUCN Criteria Group) and Maurice Rotheroe, Alexander Kovalenko, Béatrice Senn-Irlet (further members of the Executive Committee).
- Régis Courtecuisse, expressed his thanks to the work done by the retired chair Maria Lawrynowicz, related shortly the historical background of the relations between Bern Convention and Fungi and told about Jean Paul Koune's new

initiative to start working again for the inclusion of Fungi in this context. Jean-Paul, a French mycologist involved in the « Journées Européennes des Cortinaires » association took advantage of his geographical vicinity with the European parliament at Strasbourg and of some personal relationship with people inside the Bern Convention administration (besides his motivation in the topic) to act as NGO representative during the Bern convention meetings. He did a good job in introducing Fungi in this context and got support from different official representatives. He produced a synthetic document to be distributed to the Bern Convention members, which although fragmentary gathers data on Fungal conservation in Europe. Further work remains to be done, especially in connecting Jean-Paul's initiative with ECCF background. Eef Arnolds and Anders Bohlin accepted to review the list produced in the above-mentioned document. Pavel Lizon was doubtful about the officiality of the ECCF participation in this matter. Information on who is actually working on this file and who will send the proposal was requested¹.

- Régis Courtecuisse also summarized the last events related to contacts with the IUCN. In June 1998, the Planta Europa Conference held in Uppsala made good contacts possible between ECCF members (E. Arnolds, C. Perini, R. Courtecuisse, A. Bohlin) with IUCN officials (L. Hopkins, W. Strahm). It was decided that the Specialist Group for Fungi, within the SSC (Species Survival Commission) of the IUCN would be restored under the chairmanship of R. Courtecuisse. At present, Régis is organizing the new group. Among other worldwide mycologists, ECCF representatives involved in this new group were Heikki Kotiranta, Bruce Ing, Shelley Evans, Marijke Nauta, Anders Bohlin, Pavel Lizon and Claudia Perini. Questions about the role of ECCF members within the IUCN Specialized Group arose as well as questions about the IUCN Specialist Group Newsletter, produced in the past by D. Pegler. The latter will be tentatively revived in a near future. As to the role of members of this group, it was stated that ECCF is intended to build the main frame of the European component in this group (thanks to its background). Members should bring their experience and competence in the group, so that a global strategy could be proposed, taking into account the various specific problems². Further developments in this matter will be forwarded to ECCF

¹ Note by Régis Courtecuisse : in fact, there is actually a problem on this matter. A harsh debate and some anger arose among ECCF members from the fact that the initiative to start new contacts with the Bern Convention on the Fungal matter came initially from a non-ECCF member. The actual role of our council might be actually questionable. At present, Jean-Paul Koune has been integrated within the ECCF, as French delegate ; we also try to strengthen contacts in all the related parts of this file and a meeting will be planned before summer, involving Bern Convention officials, Jean-Paul Koune and ECCF representatives, so that the role and background of each associative structure involved in fungal conservation is made clear to the Bern convention people.

² Note by Régis Courtecuisse : I prepared several notes and gave a few lectures on the IUCN Specialist Group for Fungi. Specialists worldwide are now registered in the group, which is still to be completed a bit. Exchange of information and experience has started and I hope to produce documents on fungal threats and conservation methods in various parts of the world in the future. A Red List Authority (RLA in IUCN terminology) is also currently established, in order to prepare documents for threatened [fungal] species to be included in the IUCN redlists. Such documents are expected from RLA members, with the help of any relevant specialist. ECCF members will also be solicited in this purpose as far as European species will be involved.

members, for example through the mailing list. Another topic (not discussed in Alcalá) related to the IUCN activities had already been mentioned in Newsletter 9 : *Furthermore, in order to fulfill the IUCN goals, it was decided that the ECCF would start preparing a european check-list for Fungi. Since some important national check-lists exist (at least The Netherlands, Germany, some Scandinavian Countries, the French one being under current preparation), it would be possible to load all the informations in a single base, which would be completed, in a second step, with new or partial ones from the other european countries. R. Courtecuisse is ready for this work and he will take contact with several persons to build a program about that. The year 2000 deadline was proposed (perhaps rather utopically indeed...but it seems possible to proceed rather quickly. In fact the French list being planned for 2000, this work could only start just after. Perhaps 2002 could be proposed as a new deadline for this project.*

- Peter Otto summarized the story of the European Mapping Project and gave some points to open a discussion. The main aims were to 1) investigate distribution patterns, 2) strengthen the image of fungal conservation, 3) to improve the international relations among European Mycologists engaged in mapping and conservation. A sprightly discussion followed with the noticeable points: 1) the dutch doubt on the significance of a mapping project, 2) Pavel Lizon's opinion that mapping is the final output but the project should be called a database, 3) the agreement of some members with Eef Arnolds who stated that the main aim must be a European Database, 4) Erast Parmasto's questions related to the financial help we could expect for running such a program especially if we can't display a clear and [politically] interesting aim... The discussion also turned on the species that had to be observed and studied for this project. The decisional power for a list of fungi that would be the object of the European Mapping Program was given to Peter Otto³. Anyway it was stressed that the absence of species should also be considered, i.e. the fact that the species were searched but not found. Finally, an advisory board was designated for this choice of species: Peter Otto, André Fraiture (as responsible for the output of the maps, in relation to the Belgian computer program described in his report) and Mitko Karadelev, Alexander Kovalenko, David Minter and Leo Jalink.

- Information on the forthcoming events for the next few years related to some important congresses :

2001 : ECCF Meeting will be held in Finland, maybe in joint with JEC (Journées Européennes du Cortinaire).

2002 : IMC7 (International Mycological Congress) will be held in Oslo (August)

[*Maria Lawrynowicz spoke with Leif Ryvarden (organizer) and Margarith Blackwell (new president of IMA) about the possibility to include a special session on "Conservation of Fungi" in the Programme in order to contact other continents.*⁴]

³ Peter Otto communicate few weeks ago: "At the time I work for a definite conception which we can send as an official paper to the participating countries (aim, procedure, species list, funding). This conception must be settled amongst the mapping group and the executive committee."

⁴ Suggestion by Régis Courtecuisse : according to the state of this negociation, this meeting could turn to be a joint ECCF / IUCN Specialist Group meeting... Let's know your input in this idea.

2003 : CEM XIV (Congress of European Mycologists) will be held in Ukraine, organized by Prof. Irina Dudka, with field excursions and activities in Crimea, at the end of September or in early October.

REFERENCES LIST

As reported in "Newsletter 8" it was proposed to collect again the publications concerning ECCF problems, checklists, redlists, changes of mycofloras and so on. The last references-list was made by Anna Elise Jansen in 1991 - Newsletter 5. In Newsletter 9 a first part was given inviting you to send your informations to the ECCF Secretariat.

Publications concerning mapping and conservation of fungi in Switzerland of the last years.

By Beatrice Senn-Irlet

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NEW "1999": UNITED KINGDOM: 1999 - p -
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➔ In the next issue, among other arguments, information on the new
Commission on Fungi in “*OPTIMA*”
shall be brought. ⬅

Claudia Perini, Siena, Italy, ECCF secretary, January 2000