

Abstracts of Journals Received in the Library Oct –2010

Journals Abstracted

Yesca - No 22. 2010

Mushroom – Issue 104, Vol 7, No 3-4

Schweizerische Zeitschrift für Pilzkunde – Vol. 88, No. 4, 15th August 2010

Schweizerische Zeitschrift für Pilzkunde - Vol. 88, No. 5, 15th October 2010

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Yesca - No 22. 2010

Abstractor – Anne Andrews

del Pinal App. (pp. 11-26) [Spanish] Biography of Meinhard Moser, including a list of his published works. Illustrated with b/w photographs. (3 refs.)

Salcedo I (27-33) Article on sustainable management of woodland habitats. No English abstract available. (6 refs.)

Vicente J F, Hidalgo F & Oyarzabal M (pp,34-42) [Spanish] Descriptions of two interesting species found in the Sayaa-Besaya Natural Park, Cantabria, Spain. *Clitopilus scyphoides* and *Entoloma undatum* are described and varieties and forms of *C. scyphoides* are discussed. Records of six other *Entoloma* species are included. Illustrated with colour photos of f/bs. (9 refs.)

de la Parte L B (pp. 48-49) [Spanish] Description of *Gauteria otthii*, including comparison with related species. Illustrated with b/w drawings. (3 refs.)

Herrero V C (pp.50-51) [Spanish] Description of *Amanita fulva*. The related species *A. crocea* is mentioned and illustrated with a colour photo on the back cover. (6 refs.)

Herrero V C (pp. 52-53) Description of *Agaricus impudicus* a very variable species. Illustrated with colour photo on p.37. (9 refs.)

Puente A P (pp. 54-56) [Spanish] Description of *Cortinarius bivellus* including comparison with similar species. Illustrated with b/w drawings and with colour photo of f/b on inside of front cover. (3 refs.)

Puente A P (pp. 57-59) [Spanish] Description of *Cortinarius inexpectatus* illustrated with b/w drawings and with colour photo of f/b on inside of front cover. (2 refs.)

Larrea J I G (pp. 60-61) [Spanish] Description of *Boletus calopus*, illustrated with colour photo inside back cover. (4 refs.)

Lopez P (p.62) [Spanish] Description of *Picnoporus cinnabarinus* illustrated with colour photo on front cover.

Moreno A C & Velasco J R C (pp. 63-64) [Spanish] Description of *Inocybe arenicola*, illustrated with b/w photo in text and colour photo of f/b inside front cover. (3 refs.)

Garabal J A E G (pp. 65-66) Article entitled “What is ethnomycology” No English abstract.

Mushroom – Issue 104, Vol 7, No 3-4

Abstractor – Anne Andrews

Spahr D (pp. 13-18) [English] This article explains why a small digital “point and shoot” camera is as or more effective these days than a bulky SLR with extra lenses. The more advanced digital cameras these days have good macro capabilities and many exposure functions make extra equipment unnecessary. They can be carried in the pocket. The lens assembly is close to the bottom of the camera making possible a lower view of the object, which is desirable for photographing small specimens. Detailed explanations of how to use the various functions are given. Taking a large number of pictures, many of which can be deleted at no cost is advised and checking in review mode before leaving the scene is advised. There is information about extra software that can be obtained from the internet and advice about tripods and auxiliary flash. Illustrated with close-up photos of gills and pores.

Goldhor S (pp.22-27) [English] Discussion of how fungi can travel, by being transported by people, if mycorrhizal attached to trees, or in the air by wind. How far spores can travel in the air and in what length of time has been studied since the 1930s. Spores can travel through air even when there is no air movement. How exactly they get from the gills or pores of basidiomycetes to the upper air, first by detaching from the mushroom (Buller’s drop) at great velocity, quickly slowed by air resistance, then dropping into a zone of more turbulent air is described in detail. The “squirt gun mechanisms” of some ascomycete spore dispersal is then described. There are several references to web sites where videos of such dispersal can be seen.

Rogers M (pp. 28-33) [English] Report of an interview with Dr Moselio Schaechter, giving an account of the long life history of this distinguished American academic microbiologist and amateur mycologist. He is also founder and co-curator of the Registry of Mushrooms in Works of Art and talks of how interest in fungus for food or otherwise throughout history can be traced to some extent through paintings. The Registry has recorded over 1000 paintings with mushrooms in and there are certainly many more to be discovered. Dr Schaechter is retired but still teaches and also has a microbiology blog called” Small things considered: the Microbe blog” (schaechter.asmblog.org)

Shernoff L (pp. 36-47) [English & French] First of a series of historical articles about early scientific work on fungi. There is not a great deal of record of early botanical and mycological discoveries as they did not attract much public attention. Joseph Pitton de Tournefort regarded as the first mycologist published his major taxonomic work,

Elements de botanique, in 1694 early in the “Age of Enlightenment”. His approach is compared with that of Newton. He is widely credited with inventing the concept of the genus and devised the world’s first comprehensive taxonomic system. This is illustrated by many extracts from the work, in French, accompanied by translation into English. Tournefort separates taxonomy from knowledge of the uses of plants and aims to make his system as simple as possible and to this end was a lumper. He also aimed to shorten names before Linnaeus made a point of this. An account of the rather few fungi included and his rather strange classification follows. Illustrated with b/w reproductions of the original illustrations.

Shernoff L (pp.53-61) [English] After a general introduction to stinkhorns and related fungi, species found in USA are described and illustrated with colour or b/w photos and reproductions of illustrations from early works.

Lincoff G (pp. 62-65) [English] Account of the use of magic mushrooms as a therapeutic tool in western medicine as well as their use as a party drug or source of a mystical experience, and their role in religions in other cultures. Further research on therapeutic uses of these fungi is required. Illustrated with drawings from Micheli’s *Nova Plantarum Genera*.

Stijve T (pp. 66-69) [English] Account of the rare or little known *Amanita regalis* and comparison of the chemical contents of this species and of *A. muscaria* and *A. pantherina*. *A. regalis* is reputed to be more toxic than the others and several cases are discussed. A table compares the amount of Muscarine, Ibotenic acid and muscimol and the trace elements Vanadium and Selenium in the three species. The results are inconclusive and the author recommends repeating analysis using fresh material. Illustrated with colour photos inside front cover. (36 refs.)

Schweizerische Zeitschrift für Pilzkunde Vol. 88, No. 4, 15th August 2010

In German (some articles in French & Italian)

Abstractor – Ray Tantram

Graf U; Kranzlin F. (p. 134-135) [also in French p. 136, 134-135] Fungus of the month (7) is *Hymenoscyphus sulphuratus*, a tiny (2-4mm) ascomycete growing on fallen Pine needles in a wet ditch in September 2009. Macro and micro features of the bright sulphur-yellow concave cups are described. This taxon differs from similar small ascomycetes by its circular fruitbody with rudimentary stipe, and its colour. Dennis (1978) describes two other tiny cup-fungi on conifer needles, *H. epiphyllus*, and *Peziziella subtilis* which have different coloured fruitbodies and different micro features, also positive iodine reactions. A colour plate shows *Hymenoscyphus sulphuratus* in situ, line drawings show spores, asci, paraphyses and excipulum. (5 refs.).

Duc J. (p. 137-138, 139-140) [Also in French p. 139-140, 137-138] Fungus of the month (9) presents *Postia inocybe*, a moist resupinate polypore found in October 2009 on a fallen moss-covered twig of *Abies alba*. The white fungus occupied a slightly rounded area of 7 x 4 cm, which was slightly fibrous-cottony and effuso-reflexed at its edges. Pores were mainly round. The taxon is described. Jülich’s 1984 key showed several

closely related species. Bernicchia's clarifications 1995 proved helpful, as did Pieri & Rivoire's 1998 publication on *P. inocybe*. This rare species is a first collection for Switzerland, but has been recorded in England, France and Italy. A colour plate shows pores in close-up, and a table presents and compares three similar species: *P. simanii*, *P. hibernica* and *P. inocybe*. Line drawings show micro features of the three species.(5 refs.) are included.

Schenk-Jäger K. (p. 142-144) [also in French 145-147] Periscope 29 highlights matters discussed at a Congress of the European Association of Poison Centres and Clinical Toxicology, which was held in May 2009 in Bordeaux.

Five family members in France suffered from Orellanus syndrome poisoning after a meal, residues of which were later found to contain *Cortinarius orellanoides*. Only two members showed overt symptoms, but all suffered acute kidney failure. The whole family recovered after treatment, but the 11 year old boy required a kidney transplant. This demonstrates that kidney function must be checked three weeks following any suspected poisoning with *C. orellanoides* or *C. rubellus*. (1 ref.)

A poisoning case from *Amanita regalis* was reported from Finland, where it was eaten in mistake for *Macrolepiota procera*. The patient suffered from a cholinergic reaction, such as those found in poisonings by *Inocybe spp.* but many other toxins can initiate such symptoms. Both cholinergic and anti-cholinergic symptoms can be caused by *Amanita muscaria* and *Amanita regalis*, which contain ibotenic acid and muscimol. (3 refs.)

Letterbox describes a fungus poisoning study 'ProPi' from the Swiss Toxological Information Centre. Many parents telephone to report possible fungus ingestion by their children. A set of guidelines as to procedures is given, and contact details for advice shown. Expert identification of fungi involved is of extreme importance.

Roth J-J (ed.) (p. 148-149) [Only in French] A day of biodiversity on 15th May 2010 at the Natural History Museum, Fribourg attracted 40 mycologists. An attempt to record species in the Geneva area, begun six years ago, has resulted in some good records, such as the 624 species found at the Bois de Jussy (1994-2007) . Colour plates show *Geastrum minimum*, a species typical of dry riverbeds, *Omphalina rustica*, *Resinicium bicolor*, a lignicolous aphylliphore, and a typical habitat in the Cariçale de Font, on the left bank of Lake Neufchatel.

Meier P. (p. 150-151) The VSVP held a day of biodiversity at Bern Botanical gardens on 15th. May 2010, attended by 80 delegates. Seven lectures demonstrated the scope of the subject and covered important goals. Some interesting fieldwork on the inhabitants of dead plant material, dry regions in Alsace, and a research project in damp Swiss woodland were highlighted. Heinz Cléménçon wittily presented his research on the genus *Heydenia*, begun in 2005.

Flammer R. (p. 152-153) The basis of the modern VSVP (Swiss Mycological Associations) began in 1919 with the launch of the first Federal Association of Mycologists, which linked the local Societies of Burgdorf, Biberist and Solothurn.

Information centres were opened in these towns, and specimens sent in were examined free. Leo Schreier, one of the founders, did much to rationalise recording of poisonings and to reduce cases by spreading fungal knowledge, including into schools, and publishing better popular Field Guides. (5 refs.).

Flammer (p. 154-155) At the beginning of the 20th. century Leo Schreier (1885-1959), pioneered efforts to make mycology a serious science, and to make popular field guides into more than cookery books. In times of shortage, such as the first World War, people scoured local woodlands, and poisoning cases rose alarmingly. He promoted education and training of skilled mycologists. In 1935 he received a specimen that he could not assign to a genus, and which defied other notable mycologists at home and abroad. It was finally named by E J Imbach as *Squamanita schreieri*, a very rare species in a small genus, that emerges out of the stipe of its host, and replaces its cap and gills with its own. A colour plate shows Schreier's paintings of this dated 1938.

Balmer A. (p. 156-157) The Bern Mycological Association celebrated its 100th. anniversary. Some notable dates in its history are recalled.

Buser P. (p. 158-159) Two notable 'coral fungi', both rare species in Switzerland, were collected in 2009. *Artomyces pyxidatus* on a fallen *Picea* trunk in October, and *Lentaria albovinacea* on a heap of brushwood at a Nature Reserve in November. Macro and micro features are described. Colour plates show both in situ. (3 refs.).

Riva A. (160-162) ONLY IN ITALIAN – so very brief notes.

Gyromitra fastigiata was found in the southern Swiss Alps in the winter-spring of 2009-2010. This species was first recorded in 1834 as *Helvella pileo*, and later described by Kromholz as *H. fastigiata*. It was placed in *Gyromitra* in 1896. A colour plate shows it in situ, and paintings by the author show fruitbody, spores and paraphyses. There is a further painting of fruitbodies. (10 refs.)

Baumann P; Erb B. (p. 162-163) Two participants collected an uncommon poroid species on conifer wood during a Study Week in 2009. It was later identified by the authors as *Phellinus chrysoloma*. Distinguishing characters are described. This species grows predominantly on *Picea*, mainly in a flat or crust-forming state with projecting edges, and much more rarely in 'hoof' form (cf. *P. pini* on *Pinus*). Fruit bodies were found on *Picea*, and in a single case, on *Pinus*. Colour plates present it in situ, also a cap section image which shows a black line between tomentum and context. Further close-ups show the mainly angular pores with hymenial setae. Photomicrographs show hymenial setae in more detail and basidia with spores. (5 refs.)

Roesch P. (p. 164-165) The luminous orange of *Pycnoporellus fulgens* was a delight to spot from afar. It was confirmed at home later. This rare species is becoming more common in Switzerland. A colour plate shows its red reaction with KOH, and photomicrographs its microscopic incrustations. (3 refs.)

Senn-Irlet B; Ayer F; Maradan E; Ruiz-Badenelli V. (p. 178- 180, 181-183) [also in French p. 181-183, 178, 180] Fungus of the month (9), is *Leratiomyces percevalii*, a species spreading on woodchips, which has been transferred to a new genus. In 2007 mulched plantings in parts of the town of Freiburg were covered in this species, which could not be identified easily. Accurate determination was helped by the keys in Bon & Roux (2003) (as *Stropharia*), and books such as Horak (2005) (as *Psilocybe*). Macro and micro features are described. Bresinsky & Binder introduced the new generic name in 1998. DNA studies showed that *Stropharia aurantiaca* belongs here also, its correct name now being *L. ceres*. In Europe there are now 5 members of this genus, assigned by Bridge & Spooner. Three colour plates show *L. percevalii* on wood chips and as a selection of picked fruiting bodies. Photomicrographs show spores and basidia. (12 refs.).

Muscemeci E; Contu M; Curti M. [original in Italian p.184-187, German 188-190] Fungus of the month (10) is *Gamundia lonatii*, a rare, warmth-loving, middle European species. It was collected in November 2009 in damp shady mixed woodland. Macro and micro features are described. New monographs have defined the genus *Gamundia* which contains four species. This collection was confirmed with the help of Guiliano Lonati, its discoverer in 1996. Colour plates show this small pale brown species in situ and as a studio picture. Photomicrographs present spores, epicutis, cheilocystidia and pleurocystidia. Line drawings show micro features. Further information from www.polomicologico.it/forum (12 refs.)

Maggetti M (p. 191) A collection of *Tricholoma portentosum* found 15 years ago on acid sandy soil about 10m from a mixed woodland edge, has been found every year since, late in the season, even after frost. Macro features are described. The cap of this occasional species shows radial brown fibres and it smells of meal. Despite initial scepticism, this is an excellent edible fungus. Two colour plates are included.

Flammer R. (p. 192-194) The genus *Squamanita* is defined and discussed. These fungi are close to the genus *Amanita* and grow out of the stems of fruitbodies of their Agaric hosts. The literature contains six species. The mechanism of this very specialised form of parasitism has not yet been fully explained. It is also difficult to determine host species, as these are often very much deformed by the emergence of the parasite. Scent is a help here. *Squamanita odorata* and *S. paradoxa*, have been subjected to DNA analysis. Three species, *S.odorata*, *S. schreieri*, and *S. paradoxa* are described and colour plates presented. Few field mycologists are privileged to see these rare phenomena.(5 refs.).

Flammer R. (p. 196-197) [also in French p. 198, 197] Stumbling blocks and pitfalls - 1 considers the cap colour variability of *Amanita phalloides*. Many collectors do not consider it to be 'green' but describe it in terms of olive shades, and so cap colour should not be taken as a definitive identification character. This species can be defined by its other features, but sometimes its ring is missing, and others may be ambiguous. An important feature is the join between the longitudinally fibrous stem and the cap. The

stem can be lifted out quite easily. Each year fungus inspection centres confiscate several kilograms of the Death cap from collectors' baskets. A colour plate shows several fruitbodies, and a colour strip the cap colour range. A box gives toxicity details.

Stijve J. (p. 199-205) ONLY IN FRENCH Puffballs have been considered good edible fungi since the nineteenth century. Unfortunately they have more recently been found capable of concentrating heavy metals. Mercury levels especially, have been found in concentrations above Swiss legal limits for cultivated mushrooms. *Calvatia gigantea*, *C. utriformis* and *Lycoperdon perlatum* have all been implicated, and lead, cadmium, and molybdenum also found. *Bovista plumbea* additionally shows high pesticide residues. These species can be used as pollution indicators. Table 1 presents measured values of heavy metals in the first three species, for the Netherlands, Germany, England, Italy, Sweden. Switzerland and Slovenia. Table 2 quotes legal limits for cultivated mushrooms. Table 3 shows pesticide residue levels in *B. plumbea* in Switzerland. Collections well away from urban and industrial areas should pose no threats to occasional pickers. Plates show a Giant puffball harvested in woodland, *Bovista plumbea* growing, a painting of *Calvatia utriformis*, and a wild fungus market in Vevey. (14 refs.).

Riva A. (p. 206-207) ONLY IN ITALIAN – very brief résumé A new edition is planned to mark the 75th. anniversary of the catalogue of fungi in the Ticino Canton, published by Professor Oreste Matriolo in 1935. The new publication will feature 57 species from 32 genera, and in updated terminology according to Montecchi & Sarasini (2000). 38 plates show macro and micro features of fungi including hypogeous taxa. Colour plates show drawings of three hypogeous species by Alfredo Riva, and a map of Ticino. (5 refs.)

Keller J. (p. 208-212) ONLY IN FRENCH Part 1 of the story of edible fungi from prehistoric times to the present days is recounted. Documents from before the Middle Ages are rare, and concentrate on activities at religious houses. By the 17th. century fungi were used in royal banquets, and many recipes are extant. Truffles, however were utilised by rural societies more than by the nobility, where generally eating fungi was the norm. Fungi already colonised the land ahead of prehistoric people, and these ate what was to hand. In Mesopotamia and Egypt several fungal species featured in the diet. Evidence is available of the use of fungi in Ancient Greece, by the Etruscans and in Rome. Truffles are mentioned often here. Some Roman, and later recipes are given. Colour plates show a prehistoric scene, a wall painting from Egypt at the time of the Pharaohs, a Roman scene and monks dining in the middle ages.