FRITSCHIANA

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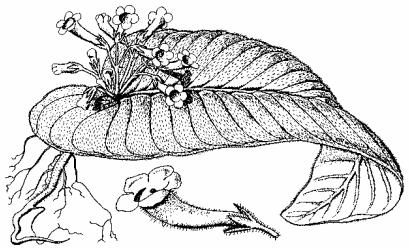

Veröffentlichungen aus dem
Institut für Pflanzenwissenschaften
der Karl-Franzens-Universität Graz

Christian SCHEUER
Dupla Graecensia Fungorum (2007, Nos 41–100)
Schedae emendatae

Uwe BRAUN & Christian SCHEUER
Colletogloeum veratri-albi* – a new acervular coelomycete on *Veratrum album

Peter ZWETKO
Notes on two collections of *Puccinia caricina* s.l. on *Carex hordeistichos* from Austria

Graz, 25. April 2007

Hofrat Prof. Dr. Karl FRITSCH
(∗ 24.2.1864 in Wien, † 17.1.1934 in Graz)

Karl FRITSCH studierte nach einem Jahr in Innsbruck an der Universität Wien Botanik und wurde dort 1886 zum Dr.phil. promoviert; 1890 habilitierte er sich. Nach Anstellungen in Wien wurde FRITSCH 1900 als Professor für Systematische Botanik an die Universität Graz berufen, wo er aus bescheidenen Anfängen ein Institut aufbaute. 1910 wurde er Direktor des Botanischen Gartens, 1916 wurde das neu errichtete Institutsgebäude bezogen. Aus der sehr breiten wissenschaftlichen Tätigkeit sind vor allem drei Schwerpunkte hervorzuheben: Floristisch-systematische Studien, besonders zur Flora von Österreich, monographische Arbeiten (besonders über *Gesneriaceae*) und Arbeiten zur systematischen Stellung und Gliederung der Monocotylen. An Kryptogamen interessierten ihn besonders Pilze und Myxomyceten.

Nachrufe: KNOLL F. 1934, Ber. Deutsch. Bot. Ges. 51: (157)–(184) (mit Schriftenverzeichnis). - KUBART B. 1935, Mitt. Naturwiss. Ver. Steiermark 71: 5–15 (mit Porträt). - TEPPNER H. 1997, Mitt. Geol. Paläont. Landesmus. Joanneum (Graz) 55: 133–136. - Im übrigen vgl. STAFLEU F.A. & COWAN R.S. 1976, Tax. Lit. 1: 892 und BARNHART J.H. 1965, Biogr. Notes Botanists 2: 12.

Graz, November 1997 H. TEPPNER

Die Serie FRITSCHIANA wurde als Publikationsorgan für die zahlreichen Aktivitäten im Zusammenhang mit der botanischen Sammlung des Institutes für Pflanzenwissenschaften, Bereich Systematische Botanik und Geobotanik (vormals Institut für Botanik), der Karl-Franzens-Universität Graz (GZU) gegründet. Vor allem SchedaeHefte der von den Mitarbeitern herausgegebenen Exsiccatenwerke sollten hier erscheinen, aber auch Exkursionsberichte sowie Listen und Indices besonders wertvoller Bestände in GZU. Das Spektrum wurde mittlerweile auf floristische und kleinere taxonomische Arbeiten sowie das Samentauschverzeichnis des Botanischen Gartens ausgeweitet. Die Schedae-Hefte des von Prof. Dr. Josef POELT begründeten, inzwischen abgeschlossenen Exsiccatenwerkes Plantae Graecenses sind die Vorläufer dieser Schriftenreihe.

Gesamtredaktion:

Dr. Christian SCHEUER, Mag. Dr. Walter OBERMAYER
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Umschlagsbild: *Carolofritschia diandra* ENGL. (= *Acanthonema strigosum* HOOK.f.); nach einer Zeichnung in HUTCHINSON J. & HEPPER F.N. 1963, Flora of West Tropical Africa, Ed. 2, Vol. II: 382.

FRITSCHIANA

Veröffentlichungen aus dem
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Bereich Systematische Botanik und Geobotanik
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Graz, 25. April 2007

In diesem Heft neu beschriebenes Taxon:
New taxon described in this issue:

Colletogloeum veratri-albi U. BRAUN & SCHEUER sp. nova
(Seite/page 29)

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Dupla Graecensia Fungorum (2007, Nos 41–100)

Christian SCHEUER*

SCHEUER C. 2007: Dupla Graecensia Fungorum (2007, Nos 41–100). - Fritschiana (Graz) 58: 1–25. - ISSN 1024-0306.

Dupla Graecensia Fungorum is a duplicate series for the distribution of fungal collections with irregular numbers of specimens. It is the successor of Dupla Fungorum distributed by the author between 1997 and 2003. Due to the irregular numbers of specimens, every institution receiving a duplicate of a collection is cited on the label.
Dupla Graecensia Fungorum (2007) is distributed to the herbaria GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, and SOMF. The complete sets comprise 60 specimens and are deposited in GZU, BPI, M, and WSP. All material for this set was collected in Austria.

Remarkable taxa in this shipment are, e.g., *Colletogloeum veratri-albi* (isotype material), *Peronospora arthurii*, *Puccinia angelicae* s.l. (on *Cnidium dubium*), *P. caricina* s.l. (on *Carex hordeistichos*), *P.* cf. *libanotidis* (on *Seseli annuum*), *P. peucedani-austriaci*, *P. taraxaci* s.l. (on *Taraxacum bessarabicum*), *Sporisorium montaniense*, *Uromyces genistae-tinctoriae* s.l. (on *Cytisus procumbens*), and *U. sarothamni* (first record in Austria).

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The present shipment of the duplicate series Dupla Graecensia Fungorum comprises 60 collections of various taxonomic groups. Dupla Graecensia Fungorum is the successor of Dupla Fungorum distributed by the author between 1997 and 2003. Due to the irregular numbers of specimens, every institution receiving a duplicate of a collection is cited on the label. See the abstract for a list of remarkable taxa in this shipment.

The grid references preceded by the abbreviation MTB refer to the grid used in the project "Floristische Kartierung Mitteleuropas" (floristic mapping of Middle Europe).

This second shipment of Dupla Graecensia Fungorum is again distributed to the following institutions (official abbreviations for public herbaria according to Index Herbariorum, also available under http://207.156.243.8/emu/ih/index.php). The four complete sets comprise 60 specimens and are deposited in GZU, BPI, M, and WSP.

GZU (Graz, Austria)
BPI (Beltsville Md, U.S.A.)
M (Munich, Germany)
WSP (Pullman Wa, U.S.A.)
HAL (Halle/Saale, Germany)
NY (New York, U.S.A.)
LI (Linz, Austria)
KL (Klagenfurt, Austria)
TROM (Tromsø, Norway)
LE (St. Petersburg, Russia)
KRAM (Kraków, Poland)
SOMF (Sofia, Bulgaria)

Sincere thanks are due to all colleagues who contributed collections, identifications, annotations and other comments to this set, especially to T. Barta (Vienna), U. Braun (Halle/S.), H. Melzer (Zeltweg), W. Obermayer (Graz), H. Teppner (Graz), H. Voglmayr (Vienna), and P. Zwetko (Graz).

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

41. **Albugo amaranthi** (Schweinitz) Kuntze

on *Amaranthus retroflexus* L.

AUSTRIA, Vienna, XI. (Simmering), along the canal W of the street Hasenleitengasse, MTB 7864/2, 48°09'N/16°25'E, *c.* 170 m alt.; ruderal roadside.

11 August 2003 leg. T. Barta, det. H. Voglmayr

Annot.: No oospores found. However, it may be assumed that this identification is correct, because the second *Albugo* species occurring on *Amaranthus*, *A. bliti* (Biv.) Kuntze, is not known from this North American host species so far (see VOGLMAYR & RIETHMÜLLER 2006: 82, 83).

VOGLMAYR H. & RIETHMÜLLER 2006: Phylogenetic relationships of *Albugo* species (white blister rusts) based on LSU rDNA sequence and oospore data. - Mycological Research 110: 75–85.

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

42. **Albugo portulacearum** (Schltdl.) Kochman & T.Majewski

Syn.: *Albugo portulacae* (DC. ex Duby) Kuntze
on *Portulaca oleracea* L.

AUSTRIA, Vienna, XI. (Simmering), along the road "Simmeringer Hauptstraße", between Awarenstraße and Baudißgasse, MTB 7864/4, 48°08'N/16°27'E, *c.* 170 m alt.; ruderal roadside.

26 August 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

43. **Coleosporium euphrasiae** (Schumach.) G.Winter

II, III on *Rhinanthus aristatus* Čelak.

AUSTRIA, Lower Austria, Kalkvoralpen, *c.* 18 km NW of Gloggnitz, Schneeberg massif, Kuhschneeberg, S of the footpath "Schnellerwagsteig", MTB 8260/1, 47°46'N/15°44'E, 700–1100 m alt.

5 July 2002 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

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Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

44. **Colletogloeum veratri-albi** U.Braun & Scheuer **ISOTYPE**

in Fritschiana (Graz) 58: 29 (2007)

on *Veratrum album* L., in necrotic leaf spots

AUSTRIA, Styria, Koralpe, 16 km W of Deutschlandsberg, *c.* 3.5 km N of the summit "Großer Speikkogel", along the path from the saddle E of the refuge Grillitschhütte down to the Bärentalalm, MTB 9155/4, 46°48'50"N/14°59'30"E, *c.* 1720 m alt.; tall herbs and smaller shrubs between *Alnus alnobetula*.

15 July 2004 leg. C. Scheuer (#4975), det. U. Braun

Annot.: The size of the conidia agrees quite well with the measurements given in the description of the holotype of *Colletogloeum veratri* (Ellis & Everh.) Morgan-Jones & R.A.Phelps on *Veratrum californicum* E.M.Durand from North America by MORGAN-JONES & PHELPS (1995). *C. veratri-albi* differs by the frequently occurring rostrate and 2-septate conidia, its host range and geographical distribution (see BRAUN & SCHEUER 2007, in this issue).

BRAUN U. & SCHEUER C. 2007: *Colletogloeum veratri-albi* – a new acervular coelomycete on *Veratrum album*. - Fritschiana (Graz) 58: 28–34.
MORGAN-JONES G. & PHELPS R.A. 1995: Notes on Coelomycetes. V. Concerning *Marssonina veratri*, a leaf-spot causing fungus of *Veratrum californicum*, reclassified in *Colletogloeum*. - Mycotaxon 55: 215–221.

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

45. **Dothidea mezerei** Fr.

on twigs of *Daphne mezereum* L.

AUSTRIA, Styria, Koralpe, 16 km W of Deutschlandsberg, *c.* 3.5 km N of the summit "Großer Speikkogel", along the path from the saddle E of the refuge Grillitschhütte down to the Bärentalalm, MTB 9155/4, 46°48'50"N/14°59'30"E, *c.* 1740 m alt.; tall herbs and shrubs between *Alnus alnobetula*.

15 July 2004 leg. & det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

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Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

46. **Dothidea sambuci** (Pers.) Fr.

on twigs of *Sambucus nigra* L.

AUSTRIA, Styria, *c.* 4 km S of Frohnleiten, *c.* 200 m above the weir S of the settlement Zellhof, at the orographically left bank of the river Mur, MTB 8757/4, 47°14'N/15°19'E, *c.* 410 m alt.

2 March 2006 leg. E. Gruber, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

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47. **Fusicladiella melaena** (Fuckel) S.Hughes

on *Carduus personata* (L.) Jacq.

AUSTRIA, Styria, Koralpe, 16 km W of Deutschlandsberg, *c.* 3.5 km N of the summit "Großer Speikkogel", along the path from the saddle E of the refuge Grillitschhütte down to the Bärentalalm, MTB 9155/4, 46°48'50"N/14°59'30"E, *c.* 1720 m alt.; tall herbs and shrubs between *Alnus alnobetula*.

15 July 2004 leg. & det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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48. **Leucotelium cerasi** (Berenger) Tranzschel

0, I on *Eranthis hyemalis* (L.) Salisb.

AUSTRIA, Styria, Graz, Geidorf distr., Botanical Garden of the Karl-Franzens-Universitaet, MTB 8958/2, 47°04'N/15°27'E, 375 m alt.

13 May 2005 leg. & det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

49. **Melampsora euphorbiae** (C.Schub.) Castagne

II, III on *Euphorbia taurinensis* All.

AUSTRIA, Burgenland, Parndorfer Platte, *c.* 13 km ENE of Neusiedl am See, railway station Zurndorf, MTB 8068/1, 47°58'N/17°01'E, 142 m alt., along the rails.

26 May, 30 May 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

50. **Melampsora rostrupii** G.H.Wagner

0, I on *Mercurialis perennis* L.

AUSTRIA, Burgenland, Rosaliengebirge, *c.* 7 km NW of Mattersburg, W of the railway station Bad Sauerbrunn, MTB 8263/2, 47°46'N/16°19'E, *c.* 300 m alt.; deciduous forest.

19 April 2000 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

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Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

51. **Microbotryum lychnidis-dioicae** (DC. ex Liro) G.Deml & Oberw.

in anthers of *Silene dioica* (L.) Clairv.

AUSTRIA, Styria, Schladminger Tauern, *c.* 17 km S of Gröbming, hiking path along the W shore of the lake Schwarzensee, MTB 8749/1, 47°17'N/13°52'E, *c.* 1170 m alt.; tall herb stands on small clearings.

6 July 2006 leg. & det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

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52. **Microstroma juglandis** (Berenger) Sacc.

on *Juglans regia* L.

AUSTRIA, Styria, Grazer Bergland, *c.* 6 km N of Graz-Andritz, E above the settlement "Fuß der Leber", MTB 8858/2, 47°09'N/15°25'E, 520 m alt.; sunny slope of a small forest road.

25 June 2006 leg. & det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

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53. **Peronospora arthurii** Farl.

on *Oenothera parviflora* L.

AUSTRIA, Graz, Geidorf distr., Holteigasse, Botanical Garden of the Karl-Franzens-Universitaet, MTB 8958/2, 47°04'N/15°27'E, *c.* 375 m alt.

27 May 2006 leg. & det. C. Scheuer, conf. H. Voglmayr

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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54. **Peronospora dentariae** Rabenh.

on *Cardamine bulbifera* (L.) Crantz, Syn.: *Dentaria bulbifera* L.

AUSTRIA, Lower Austria, *c.* 7 km NW of Klosterneuburg, N boundary of the Wienerwald, ENE of the castle Greifenstein, MTB 7663/2, 48°21'N/16°15'E, *c.* 200 m alt.; deciduous forest.

15 April 2002 leg. T. Barta, det. Ch. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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55. "**Phoma**" **sp.**

on stored fruit of *Cucurbita pepo* var. *texana* (Scheele) D.Decker (wild form, harvest 2003)

AUSTRIA, Styria, Graz, Geidorf distr., Botanical Garden of the Karl-Franzens-Universitaet, MTB 8958/2, 47° 04'N/15°27'E, 375 m alt.; cellar of the greenhouses.

20 April 2004 leg. H. Teppner

Annot.: An identification of the species and/or annotations would be gratefully acknowledged.

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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56. **Phragmidium sanguisorbae** (DC.) J.Schröt.

II, III on *Sanguisorba minor* subsp. *polygama* (Waldst. & Kit.) Coutinho

AUSTRIA, Vienna, II. (Leopoldstadt), E of the bridge "Freudenauer Hafenbrücke", MTB 7864/2, 48°10'N/16°28'E, *c.* 160 m alt., ruderal slope.

16 December 1999 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

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57. **Phyllosticta convallariae** Pers.

on *Polygonatum odoratum* (Mill.) Druce
[Teleomorph: *Guignardia*]

AUSTRIA, Styria, Grazer Bergland, Graz, Andritz distr., 5.4 km NNW of the centre of Graz, Admonter Kogel, "Türkenschanze" at the top of the rock climbing area, MTB 8858/3, 47°06'45"N, 15°23'50"E, 440 m alt.; mixed forest (with *Quercus pubescens*) on calcareous rocks.

5 June 2006 leg. W. Obermayer (#11148), det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL

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58. **Podosphaera ferruginea** (Schltdl.) U.Braun & S.Takam.

Syn.: *Sphaerotheca ferruginea* (Schltdl.) L.Junell
on *Sanguisorba officinalis* L.

AUSTRIA, Burgenland, *c.* 9 km SSE of Oberpullendorf, N of Klostermarienberg, along the river Rabnitz, MTB 8565/3, 47°25'N/16°34'E, *c.* 220 m alt.; grassy slope along the river bed.

14 September 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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59. **Puccinia** cf. **absinthii** DC.

Syn. *Puccinia tanaceti* DC. s.l.
II on *Artemisia scoparia* Waldst. & Kit.

AUSTRIA, Burgenland, Parndorfer Platte, *c.* 13 km ENE of Neusiedl am See, railway station Zurndorf, MTB 8068/1, 47°58'N/17°01'E, 142 m alt.; between the rails.

9 September 2004 leg. T. Barta, det. P. Zwetko

Annot.: No records of uredinia on this host could be traced in the literature. Only the microcyclic *P. artemisiicola* P.Syd. & Syd. and aecia assigned to the *P. stipina* group have been found so far (GÄUMANN 1959: 653, 734).

GÄUMANN E. 1959: Die Rostpilze Mitteleuropas mit besonderer Berücksichtigung der Schweiz. - Beiträge zur Kryptogamenflora der Schweiz XII, 1407 pp.

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

60. **Puccinia angelicae** (Schumach.) Fuckel, sensu lato

II, III on *Cnidium dubium* (Schkuhr) Thell.

AUSTRIA, Lower Austria, March valley, *c.* 10.5 km ESE of Zistersdorf, E of Sierndorf an der March, near the meadows "Alte Wiesen", MTB 7467/3, 48°30'N/16°54'E, *c.* 150 m alt.; edge of a wet meadow in the floodplain area.

21 August 2004 leg. T. Barta, det. C. Scheuer

Annot.: Like in an earlier collection on this host, published and distributed as *Mycotheca Graecensis* 383 (det. P. Zwetko, in SCHEUER 2004: 12), the teliospore walls are smooth and relatively thin. According to GÄUMANN (1959: 955), *Puccinia cnidii* Lindr. would have thick, somewhat irregularly ornamented walls.

GÄUMANN E. 1959: Die Rostpilze Mitteleuropas mit besonderer Berücksichtigung der Schweiz. - Beiträge zur Kryptogamenflora der Schweiz XII, 1407 pp.
Scheuer Ch. 2004: Mycotheca Graecensis, Fasc. 19 & 20 (Nr. 361–400) und alphabetisches Gesamtverzeichnis. - Fritschiana (Graz) 46: 1–24.

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

61. **Puccinia angelicae** (Schumach.) Fuckel, sensu lato

II, III on *Cnidium dubium* (Schkuhr) Thell.

AUSTRIA, Lower Austria, March valley, *c.* 9.5 km E of Gänserndorf, SSE of Zwerndorf an der March, between the areas "Sandparz" and "Rohrwiese", MTB 7667/3, 48°20'N/16°51'E, *c.* 140 m alt.; wet meadow.

12 September 2004 leg. T. Barta, det. C. Scheuer

Annot.: Like in an earlier collection on this host, published and distributed as *Mycotheca Graecensis* 383 (det. P. Zwetko, in SCHEUER 2004: 12), the teliospore walls are smooth and relatively thin. According to GÄUMANN (1959: 955), *Puccinia cnidii* Lindr. would have thick, somewhat irregularly ornamented walls.

GÄUMANN E. 1959: Die Rostpilze Mitteleuropas mit besonderer Berücksichtigung der Schweiz. - Beiträge zur Kryptogamenflora der Schweiz XII, 1407 pp.
Scheuer Ch. 2004: Mycotheca Graecensis, Fasc. 19 & 20 (Nr. 361–400) und alphabetisches Gesamtverzeichnis. - Fritschiana (Graz) 46: 1–24.

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

62. **Puccinia arenariae** (Schumach.) J.Schröt.

III on *Dianthus barbatus* L.

AUSTRIA, Styria, Oberes Murtal, Zeltweg, Neuzeltweg, MTB 8854/2, 47°11'N/ 14°44'E, *c.* 670 m alt.; flower bed.

December 2003 leg. H. Melzer, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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63. **Puccinia asperulae-aparines** Picb.

III on *Galium rivale* (Sibth. & Sm.) Griseb.

AUSTRIA, Lower Austria, March valley, *c.* 13.5 km E of Zistersdorf, *c.* 3 km ESE of Drösing, NE of the wetland area "Dunawiesen", close to the bank of the river March, MTB 7467/4, 48°31'N/16°56'E, *c.* 145 m alt.; along a path in the floodplain forest.

18 October 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

64. **Puccinia caricina** DC., sensu lato

II, (III) on *Carex hordeistichos* Vill.

AUSTRIA, Lower Austria, Thermenlinie, *c.* 4 km SE of Berndorf, near St. Veit an der Triesting, along a forest path at the W foot of the hill "Pfarrkogel", MTB 8062/4, 47°55'N/16°09'E, 400–420 m alt.; wet clearing.

8 September 2002 leg. T. Barta, det. P. Zwetko

Annot.: Records of rust fungi on this host, which is quite rare in Austria, need further investigation (POELT & ZWETKO 1997: 118). See also the short paper by ZWETKO (2007, in this issue). Another rich collection has already been distributed as Mycotheca Graecensis no. 405 (SCHEUER 2006: 3).

POELT J. & ZWETKO P. 1997: Die Rostpilze Österreichs. 2., revidierte und erweiterte Auflage des Catalogus Florae Austriae, III. Teil, Heft 1, Uredinales. - Biosystematics and Ecology Series 12, 365 pp.
SCHEUER C. 2006: Mycotheca Graecensis, Fasc. 21 (Nos 401–420). - Fritschiana (Graz) 54: 1–9.
ZWETKO P. 2007: Notes on two collections of *Puccinia caricina* s.l. on *Carex hordeistichos* from Austria. - Fritschiana (Graz) 58: 35–38.

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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65. **Puccinia caricina** DC. **var. caricina**

II, III on *Carex pseudocyperus* L.

AUSTRIA, Burgenland, Leitha valley, *c.* 12 km NE of Neusiedl am See, next to the village Gattendorf (48°01'N/16°59'E, 147 m alt.); bank of a pond.

7 October 2004 leg. T. Barta, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

66. **Puccinia conglomerata** (F.Strauss) Röhl.

III on *Homogyne alpina* (L.) Cass.

AUSTRIA, Styria, Schladminger Tauern, 18 km SSE of Gröbming, *c.* 1.5 km SW of St. Nikolai im Sölktal, along the orographically right bank of the stream Bräualmbach, MTB 8650/3, 47°18'N/14°02'E, *c.* 1160 m alt.; pasture near the road.

7 July 2006 leg. & det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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67. **Puccinia coronata** Corda

0, I on *Frangula alnus* Mill.

AUSTRIA, Styria, Kaiserwald S of Graz, 5.5 km SW of Kalsdorf, near the large fishpond W of Wundschuh, MTB 9058/4, 46°55'N/15°25'E, *c.* 330 m alt.

14 June 2006 leg. W. Obermayer, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

68. **Puccinia coronata** Corda

II, III on *Glyceria maxima* (Hartman) Holmberg

AUSTRIA, Lower Austria, Danube valley, E of Fischamend, path along the stream Fischa, at the SE edge of the floodplain forest "Schüttlau", MTB 7865/4, 48°07'N/16°38'E, *c.* 145 m alt.

23 September 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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69. **Puccinia crepidis** J.Schröt.

0, I, (II) on *Crepis tectorum* L.

AUSTRIA, Lower Austria, Marchfeld, *c.* 8.5 km WSW of Gänserndorf, near Strasshof an der Nordbahn, S of the settlement Wendlingerhof, MTB 7665/4, 48°19'N/16°36'E, *c.* 165 m alt.; sandy fallow land.

May 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

70. **Puccinia galii-verni** Ces.

III on *Cruciata glabra* (L.) Ehrend.

AUSTRIA, Lower Austria, Bucklige Welt, *c.* 2 km S of Aspang-Markt, along the railway station Ausschlag-Zöbern, MTB 8462/4, 47°32'N/16°05'E, 630 m alt.

20 October 2002 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

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Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

71. **Puccinia lactucarum** Syd.

II, III on *Lactuca quercina* subsp. *chaixii* (Vill.) P.Fourn.

AUSTRIA, Lower Austria, Weinviertel, between Wolkersdorf and Mistelbach, *c.* 7 km NNW of Wolkersdorf, along the railway S of the railway stop Hautzendorf, MTB 7564/2, 48°27'N/16°29'E, *c.* 210 m alt.; shrub stand.

15 July 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

72. **Puccinia lactucarum** Syd.

II, (III) on *Lactuca quercina* L. subsp. *quercina*

AUSTRIA, Lower Austria, Weinviertel, between Wolkersdorf and Mistelbach, *c.* 10 km SW of Mistelbach, along the railway SW to WSW of the railway station Neubau-Kreuzstetten, MTB 7564/2, 48°29'N/16°29'E, *c.* 250 m alt.; slope with shrubs.

10 July 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

73. **Puccinia** cf. **libanotidis** Lindr.

III on *Seseli annuum* L.

AUSTRIA, Lower Austria, Marchfeld, *c.* 10 km WSW of Gänserndorf, near Strasshof an der Nordbahn, along the railway WSW of the railway stop Helmahof, MTB 7665/4, 48°18'N/16°35'E, *c.* 165 m alt.

Late summer – autumn 2002 leg. T. Barta, det. C. Scheuer

Annot.: The germ pore of the lower cell of the teliospore is often not close to the septum but conspicuously further below, sometimes for more than 1/3 of the cell length. However, as this *P.* cf. *libanotidis* has already been found on *Seseli annuum* and other rare *Seseli* species in eastern Austria (e.g., SCHEUER 1998: 29, 2006: 5), the collection is distributed under this name. It should be added here that GÄUMANN (1959: 964, 954) mentioned *Seseli annuum* not only as a facultative host of *P. libanotidis* (infection experiment), but also of his highly host-specific *P. aethusae* f.sp. *seseli-annui* Gäumann.

GÄUMANN E. 1959: Die Rostpilze Mitteleuropas mit besonderer Berücksichtigung der Schweiz. - Beiträge zur Kryptogamenflora der Schweiz XII, 1407 pp.
SCHEUER C. 1998: Dupla Fungorum (1998), verteilt vom Institut für Botanik der Universität Graz (GZU). - Fritschiana (Graz) 15: 23–31.
SCHEUER C. 2006: Mycotheca Graecensis, Fasc. 21 (Nos 401–420). - Fritschiana (Graz) 54: 1–9.

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

74. **Puccinia malvacearum** Bertero ex Mont.

III on *Alcea biennis* Winterl

AUSTRIA, Lower Austria, Wiener Becken, *c.* 6.5 km NE of Traiskirchen, between Laxenburg and Münchendorf, along the stream Aubach (Schwechat), MTB 7964/1, 48°03'N/16°22'E, *c.* 180 m alt.; grassy slope along the stream bed.

2 July, 12 July 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

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Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

75. **Puccinia malvacearum** Bertero ex Mont.

III on *Malva pusilla* Sm.

AUSTRIA, Lower Austria, March valley, *c.* 4 km NW of Marchegg, SSW of Baumgarten an der March, NW of the mound "Galgenhöhe", beside the path along the stream "Mühlbach", MTB 7667/3, 48°18'N/16°52'E, *c.* 140 m alt.

27 October 2005 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

76. **Puccinia menthae** Pers.

II on *Clinopodium vulgare* L.

AUSTRIA, Lower Austria, Weinviertel, *c.* 7 km NNW of Mistelbach, W of the railway stop Hörersdorf, MTB 7365/3, 48°37'N/16°30'E, 260–280 m alt.

7 July 2002 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

77. **Puccinia paludosa** Plowr.

II, (III) on *Carex elata* × ?

AUSTRIA, Styria, Kaiserwald S of Graz, 5.5 km SW of Kalsdorf, near the large fish pond W of Wundschuh, MTB 9058/4, 46°55'N/15°25'E, *c.* 330 m alt.

14 June 2006 leg. W. Obermayer, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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78. **Puccinia peucedani-austriaci** Mayor ex Gäum.

(II), III on *Peucedanum austriacum* (Jacq.) Koch

AUSTRIA, Lower Austria, Bucklige Welt, *c.* 6 km E of Neunkirchen, between Pitten and Guntrams, MTB 8263/3, 47°43'N/16°10'E, 360–400 m alt.; mixed forest with *Pinus sylvestris*.

Late summer – autumn, *c.* 2000 leg. T. Barta, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

79. **Puccinia podospermi** DC.

0, I on *Podospermum canum* C.A.Mey.

AUSTRIA, Lower Austria, Marchfeld, *c.* 6.5 km ESE of Wolkersdorf, N of Bockfließ, N side of the hill Freiberg, MTB 7665/2, 48°22'N/16°36'E, 180–200 m alt.; grassy spot.

7 May 2005 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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80. **Puccinia podospermi** DC.

0, I on *Podospermum canum* C.A.Mey.

AUSTRIA, Lower Austria, Wiener Becken, *c.* 8 km NW of Bruck an der Leitha, NW of Arbesthal, S foot of the hill "Gugelberg", MTB 7966/1, 48°04'N/16°41'E, *c.* 200 m alt.

22 May 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

81. **Puccinia punctata** Link

II, III on *Galium elongatum* K.Presl

AUSTRIA, Lower Austria, March valley, *c.* 3.5 km WNW of Marchegg, near Baumgarten an der March, W of the dike, close to the wetland area "Holzwiese", MTB 7667/3, 48°18'N/16°52'E, *c.* 140 m alt.

14 August 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

82. **Puccinia recondita** Roberge ex Desm., sensu lato

0, I on *Clematis recta* L.

AUSTRIA, Lower Austria, Steinfeld, *c.* 6 km W of Wiener Neustadt, near Bad Fischau, along the railway near the station Brunn an der Schneebergbahn, MTB 8162/4, 47°49'N/16°09'E, *c.* 285 m alt.

8 June 2002 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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83. **Puccinia recondita** Roberge ex Desm., sensu lato

0, I on *Thalictrum minus* L.

AUSTRIA, Lower Austria, lower Thaya valley, *c.* 19.5 km E of Poysdorf, *c.* 8 km N of Hohenau an der March, SE of Bernhardsthal, near the burial grounds "Alte Grabhügel" (48°40'N/16°53'E), MTB 7367/1, *c.* 170 m alt.

11 May 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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84. **Puccinia silai** Fuckel

Syn.: *Puccinia angelicae* (Schumach.) Fuckel s.l.
II, III on *Silaum silaus* (L.) Schinz & Thell.

AUSTRIA, Lower Austria, Wiener Becken, *c.* 7.5 km SE of Gramatneusiedl, S of Götzendorf an der Leitha, NE of Wasenbruck, MTB 8065/1, 47°59'N/16°34'E, *c.* 175 m alt.; remnants of a wet meadow.

12 July 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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85. **Puccinia taraxaci** Plowr., sensu lato

II on *Taraxacum bessarabicum* (Hornem.) Hand.-Mazz.

AUSTRIA, Burgenland, W shore of the Neusiedler See, S of Rust, MTB 8266/1, 47°47'N/16°40'E, *c.* 115 m alt.; patchy grassland on saline soil along the edge of the *Phragmites* belt.

9 September 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

86. **Pucciniastrum agrimoniae** (DC.) Tranzschel

II on *Agrimonia eupatoria* L.

AUSTRIA, Vienna, XXI. (Floridsdorf), N of Stammersdorf (48°18'N/16°24'E), MTB 7664, 190–220 m alt.

3 September 2002 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE, KRAM, SOMF

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

87. **Pucciniastrum epilobii** G.H.Otth

II, III on *Epilobium* cf. *collinum* C.C.Gmel.

AUSTRIA, Lower Austria, Waldviertel, E of Gmünd, forest path NE of the pond "Pilzteich", MTB 7256/1, 48°45'N/15°00'E, *c.* 515 m alt.

11 October 2000 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
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88. **Sporisorium montaniense** (Ellis & Holw.) Vánky

in inflorescences of *Eragrostis minor* Host

AUSTRIA, Lower Austria, March valley, *c.* 9 km ENE of Zistersdorf, 4.5 km NNW of Drösing, sandpit NE of Niederabsdorf, MTB 7467/1, 48°34'N/16°52'E, *c.* 160 m alt.

Late summer 2004 leg. T. Barta, det. P. Zwetko

Annot.: This collection of well-developed material is of special importance, because SCHOLZ & SCHOLZ (1988: 92) mentioned only a single record from Austria, without further details (also cited by ZWETKO & BLANZ 2004: 126).

SCHOLZ H. & SCHOLZ I. 1988: Die Brandpilze Deutschlands (Ustilaginales). - Englera 8, 691 pp.
ZWETKO P. & BLANZ P. 2004: Die Brandpilze Österreichs. Catalogus Florae Austriae III/3. - Biosystematics and Ecology Series 21, IV+241 pp.

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

89. **Uromyces caraganae** (Thüm.) Magnus

Syn.: *Uromyces genistae-tinctoriae* (Pers.) G.Winter s.l.,
U. laburni (DC.) Fuckel
(II), III on *Colutea arborescens* L.

AUSTRIA, Lower Austria, Marchfeld, *c.* 10 km WSW of Gänserndorf, along the railway WSW of the stop Helmahof, MTB 7665/4, 48°18'N/16°35'E, *c.* 165 m alt.; planted shrubs.

Late summer – autumn 2002 leg. T. Barta, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

90. **Uromyces ficariae** (Schumach.) Lév.

III on *Ficaria calthifolia* Reichenb.

AUSTRIA, Burgenland, W shore of the Neusiedler See, E of Schützen am Gebirge, S of the settlement Seehof, MTB 8165/2, 47°51'N/16°39'E, *c.* 125 m alt.; dry grassland.

25 April 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

91. **Uromyces genistae** Fuckel

Syn.: *Uromyces genistae*-tinctoriae (Pers.) G.Winter s.l.,
U. laburni Fuckel s.l., *U. pisi* (DC.) G.H.Otth s.l.
II on *Genista sagittalis* L.
often with parasitic *Sphaerellopsis filum* (Biv.) B.Sutton

AUSTRIA, Lower Austria, Bucklige Welt, *c.* 3 km S of Aspang-Markt, slope of the railroad line S of the station Ausschlag-Zöbern, MTB 8462/4, 47°31'N/16° 05'E, *c.* 630 m alt.

Autumn 2002 leg. T. Barta, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

92. **Uromyces genistae-tinctoriae** (Pers.) G.Winter, sensu lato

(II), III on *Cytisus procumbens* (Waldst. & Kit. ex Willd.) Spreng.,
(Syn. *Genista procumbens* Waldst. & Kit., *Cytisus kitaibelii* Vis.)

AUSTRIA, Lower Austria, Weinviertel, *c.* 2 km N of Retz, at the E edge of the area named "Muzion", MTB 7261/2, 48°46'N/15°57'E, *c.* 295 m alt.; dry grassland.

6 July 2003 leg. T. Barta, det. P. Zwetko

Annot.: GUYOT (1957: 385) cited a record by HRUBY (1927: 164) on this host species from southern Moravia (Czech Republic).

GUYOT A.L. 1957: Les Urédinées. Tome III. Genre Uromyces. c) Espèces parasites appartenant à la famille des Légumineuses. - Paris: Éditions P. Lechevalier.
HRUBY J. 1927: Beiträge zur Pilzflora Mährens und Schlesiens. - Hedwigia 67: 150–213.

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

93. **Uromyces lineolatus** (Desm.) J.Schröt.

II, III on *Bolboschoenus maritimus* agg.

AUSTRIA, Lower Austria, southern Weinviertel, between Ulrichskirchen and Wolkersdorf, along an artificial branch of the stream Rußbach, MTB 7665/1, 48°23'N/16°30'E, *c.* 175 m alt.; on silty soil.

9 October 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

94. **Uromyces lineolatus** (Desm.) J.Schröt.

II, III on *Bolboschoenus maritimus* agg.

AUSTRIA, Lower Austria, southern Weinviertel, 4.5 km NNW of Wolkersdorf, E of the railway stop Schleinbach, MTB 7564/4, 48°25'N/16°29'E, *c.* 180 m alt.; on silty soil.

12 September 2003 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

95. **Uromyces lycoctoni** (Kalchbr.) Trotter

III on *Aconitum lycoctonum* subsp. *vulparia* (Reichenb. ex Sprengel) Nyman

AUSTRIA, Lower Austria, southern Weinviertel, *c.* 6 km NW of Wolkersdorf, between Schleinbach and the hill Glockenberg, MTB 7564/4, 48°25'N/16° 27'E, *c.* 300 m alt.; along a small stream.

27 June 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

96. **Uromyces ornithogali** (Wallr.) Lév., sensu stricto

III on *Gagea villosa* (MB.) Duby

AUSTRIA, Vienna, XI. (Simmering), northern part of the cemetery "Zentral-friedhof", MTB 7864/2, 48°09'N/16°26'E, 170–175 m alt.

17 April 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

97. **Uromyces ornithogali** (Wallr.) Lév., sensu stricto

III on *Gagea villosa* (MB.) Duby

AUSTRIA, Lower Austria, Steinfeld, Wiener Neustadt, cemetery, MTB 8163/3, 47°49'N/16°14'E, 265 m alt.; dry grassy spots.

27 March 2004 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

98. **Uromyces punctatus** J.Schröt., sensu lato

Syn.: *Uromyces pisi-sativi* (Pers.) Liro s.l.
II on *Oxytropis pilosa* (L.) DC.

AUSTRIA, Lower Austria, Weinviertel, *c.* 8.5 km ESE of Retz, Pulkau valley, vineyards N of Jetzelsdorf (48°42'N/16°03'E), MTB 7262/3, 220–230 m alt.; grassy spot among the vineyards.

September 2005 leg. T. Barta, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

99. **Uromyces sarothamni** Guyot & Massenot

Syn.: *Uromyces genistae*-tinctoriae (Pers.) G.Winter s.l.,
Uromyces laburni Fuckel s.l., *Uromyces pisi* (DC.) G.H.Otth s.l.
II on *Cytisus scoparius* L.

AUSTRIA, Lower Austria, Marchfeld, near Strasshof an der Nordbahn, SSE of the railway stop Helmahof, MTB 7665/4, 48°18'N/16°36'E, *c.* 165 m alt.; planted shrubs.

9 December 2002 leg. T. Barta, det. P. Zwetko

Annot.: First record in Austria!

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

SCHEUER C. 2007: **Dupla Graecensia Fungorum** (2007, nos 41–100). Fritschiana 58: 1–25.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

100. **Vankya heufleri** (Fuckel) Ershad

on leaves of *Tulipa sylvestris* L.

AUSTRIA, Vienna, XV. (Rudolfsheim-Fünfhaus), near the castle Schönbrunn, Auer-Welsbach-Park, MTB 7863/2, 48°11'N/16°19'E, *c.* 190 m alt.; patchy park lawn.

4 April 2000 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

Schedae emendatae for fungal collections published and distributed in Dupla Graecensia Fungorum and Reliquiae Petrakianae

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SCHEUER C. 2007: Schedae emendatae for fungal collections published and distributed in Dupla Graecensia Fungorum and Reliquiae Petrakianae. - Fritschiana (Graz) 58: 26–27. - ISSN 1024-0306

Three of the following Schedae emendatae have become necessary because of erroneous collecting dates given in the original schedae (SCHEUER 2006a).

In addition, Prof. A. Yu. Akulov (Univ. of Kharkiv, Ukraine) has kindly drawn attention to some historical discrepancies in the schedae of Reliquiae Petrakianae. For example, no. 2771 (*Uromyces tinctoriicola*, see also SCHEUER 2006b) was collected at the time of the Russian Empire, not of the Soviet Union (U.S.S.R.). As the editors of Reliquiae Petrakianae had decided that the largest political units (countries) given on the labels should generally refer to the situation in the 1970s and 1980s, such discrepancies should have been indicated, at least by square brackets (see below). The discrepancy becomes even more serious, if political subdivisions are involved. E.g., the Kharkov Gubernia (named "Prov. Charkow" on Petrak's original label) of the time of the Russian Empire is not identical with younger political subdivisions.

SCHEUER C. 2006a: Dupla Graecensia Fungorum (2006, Nos 1–40). - Fritschiana (Graz) 54: 10–24.
SCHEUER C. 2006b: Schedae emendatae for fungal collections published and distributed in Reliquiae Petrakianae, Mycotheca Graecensis, and Dupla Fungorum. - Fritschiana (Graz) 54: 25–28.

SCHEUER C. 2006: **Dupla Graecensia Fungorum** (2006, nos 1–40). Fritschiana 54: 10–24.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

13. **Montagnula rhodophaea** (Bizz.) Leuchtm.

on floating dead culms of *Phragmites australis* (Cav.) Trin. ex Steud.

AUSTRIA, Burgenland, Neusiedler See, E of Mörbisch am See, close to the large *Phragmites* island next to the open air stage "Seebühne", MTB 8266/1, 47°45'N/16°42'E, *c.* 115 m alt.

24 July 1997 leg. M. Magnes & C. Scheuer, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL

SCHEUER C. 2006: **Dupla Graecensia Fungorum** (2006, nos 1–40). Fritschiana 54: 10–24.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

15. **Phragmidium tuberculatum** Jul. Müller

II, (III) on *Rosa rubiginosa* agg.

AUSTRIA, Lower Austria, Steinfeld, *c.* 6.5 km W of Wiener Neustadt, near Bad Fischau, W of Brunn an der Schneebergbahn, MTB 8162/4, 47°49'N/16°08'E, *c.* 300 m alt.

8 June 2002 leg. T. Barta, det. C. Scheuer

Distributed to: GZU, BPI, M, WSP, HAL, NY

SCHEUER C. 2006: **Dupla Graecensia Fungorum** (2006, nos 1–40). Fritschiana 54: 10–24.
Distributed by the *Institut für Pflanzenwissenschaften*, *Karl-Franzens-Universität*, Graz (GZU)

21. **Puccinia graminis** Pers.

II, III on *Agrostis scabra* Willd.

AUSTRIA, Lower Austria, Waldviertel, *c.* 6 km N of Gmünd, near Neu-Nagelberg, sandpit at the NE foot of the hill "Gelsenberg", MTB 7155/4, 48°49'N/14°58'E, 470 m alt.

29 October 2005 leg. T. Barta, det. P. Zwetko

Distributed to: GZU, BPI, M, WSP, HAL, NY, LI, KL, TROM, LE

R e l i q u i a e P e t r a k i a n a e
Institut für Botanik Graz

2771. **Uromyces tinctoriicola** MAGNUS

III auf *Euphorbia glareosa*

[U.S.S.R.: Ukrainische SSR,**]** Prov. Charkow, Distr. Starobjelsk.

26.06.1903 leg. I. SCHIRAJEWSKY, redet. P. ZWETKO

Annot. [P. ZWETKO]: Originally distributed under the tentative name *Uromyces excavatus* (DC.) Lév. "fo. *verrucosa*" (Fasc. XIV, 1992). According to the description and illustrations by GÄUMANN (1959: 318) and HIRSCH (1982: 234), this collection agrees well with *U. tinctoriicola*.

GÄUMANN E. 1959: Die Rostpilze Mitteleuropas mit besonderer Berücksichtigung der Schweiz. - Beiträge zur Kryptogamenflora der Schweiz 12, 1407 pp. - Bern: Büchler & Co.
HIRSCH G. 1982: Die autözischen *Uromyces*-Arten (Basidiomycetes, Uredinales) auf *Euphorbia seguieriana* Necker. - Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena/Thüringen, Mathematisch-naturwissenschaftliche Reihe 31: 229–238.

Colletogloeum veratri-albi – a new acervular coelomycete on *Veratrum album*

Uwe BRAUN* & Christian SCHEUER**

BRAUN U. & SCHEUER C. 2007: *Colletogloeum veratri-albi* – a new acervular coelomycete on *Veratrum album*. - Fritschiana (Graz) 58: 28–34. ISSN 1024-0306.

Abstract: *Colletogloeum veratri-albi*, distributed on *Veratrum album* and the closely allied *V. lobelianum* (≡ *V. album* subsp. *lobelianum*) in Europe, the Caucasus area and Transcaucasia, is described and illustrated. The new species is closely related to the North American *C. veratri* on *V. californicum*, but can easily be discriminated by obvious differences in the shape of the conidia, host range and geographical distribution.

Zusammenfassung: *Colletogloeum veratri-albi*, verbreitet auf *Veratrum album* und der eng verwandten Art *V. lobelianum* (≡ *V. album* subsp. *lobelianum*) in Europa, im Kaukasus und in Transkaukasien, wird beschrieben und abgebildet. Die neue Art ist eng verwandt mit *C. veratri* auf *Veratrum californicum* in Nordamerika, von der sie aber gut abgrenzbar ist durch klare Unterschiede in den Konidienmerkmalen, im Wirtsspektrum und in der geographischen Verbreitung.

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1. Introduction

ELLIS & EVERHART (1895) introduced *Marssonia veratri* Ellis & Everh. for a new coelomycete on *Veratrum californicum* in North America. A similar fungus on *V. album* s. lat. (very probably *V. lobelianum*) in the Caucasus area and Transcaucasia was assigned to this species and described as *M. veratri* f. *veratri-albi* Bäumler (in HOLLÓS 1902). Due to nomenclatural reasons, MAGNUS (1906) introduced the new name *Marssonina* Magnus for the homonymous generic name *Marssonia* J.C. Fischer (non H. Karsten), including the new combination *Marssonina veratri* (Ellis & Everh.) Magnus. The confusion of the true identity of European collections on *Veratrum album*, going back to PETRAK (1937), who reduced *M. veratri* to synonymy with *Gloeosporium veratri* (Allesch.) Höhn. (≡ *Fusoma veratri* Allesch.), was a serious, long lasting obstacle for a critical re-examination and reassessment of the fungi involved. The hyphomycete *Mycocentrospora veratri* (Peck) U. Braun [≡ *Cercosporella veratri* Peck (= *Fusoma veratri*, ≡ *Gloeosporium veratri*, ≡ *Fusarium veratri* (Allesch.) Höhn., ≡ *Septogloeum veratri* (Allesch.) Wollenw.)] and the coelomycete *Colletogloeum veratri* (Ellis & Everh.) Morgan-Jones & R.A.Phelps (≡ *Marssonia veratri*, ≡ *Marssonina veratri*) are two quite distinct, unrelated species (ONDŘEJ 1974, BRAUN 1991, MORGAN-JONES & PHELPS 1995a,b). MORGAN-JONES & PHELPS (1995b) discussed the history, generic affinity, nomenclature and taxonomy of *M. veratri* in detail and assigned this species to *Colletogloeum* Petr. New collections of the coelomycete on *Veratrum album* from Austria led to a re-examination and re-assessment of this fungus.

2. Material and methods

New collections of *Colletogloeum* sp. on *Vetratrum album* from Austria and several older herbarium samples have been examined using standard light microcopy (Olympus BX50). The samples have been mounted in distilled water, pure lactic acid and lactic acid stained with aniline for microscopic examination. Most of the Austrian specimens examined are deposited at GZU (Herbarium, Institut für Pflanzenwissenschaften, Karl-Franzens-Universität Graz). A recent collection from Austria is distributed in the duplicate series Dupla Graecensia Fungorum (SCHEUER 2007: 3, in this issue). Additional collections examined are deposited at HBG (Herbarium Hamburgense, Biozentrum, Universität Hamburg).

3. Results

Detailed examinations of *Colletogloeum* specimens on *Veratrum album* and *V. lobelianum*, and a comparison with *C. veratri* on *Veratrum californicum*, using the comprehensive description of this species in MORGAN-JONES & PHELPS (1995b), which was based on type material, revealed obvious differences between the two fungi. Owing to the morphological peculiarities of the European collections, the different hosts and the geographical isolation, the fungus on *Veratrum album/V. lobelianum* and *C. veratri* on *V. californicum* are considered two distinct species, at which the European taxon needs to be described at species rank.

Colletogloeum veratri-albi U. Braun & Scheuer, **sp. nova** (MB 510661)
Fig. 1, 2

= *Marssonia veratri* f. *veratri-albi* Bäumler,
in Hollós, Növényt. Közlem. 1: 154 (1902)
= *Marssonina veratri* auct. p.p.
= *Gloeosporium veratri* auct. p.p.
= *Colletogloeum veratri* auct. p.p.
= *Colletogloeum veratri* auct. p.p.

A specie simillima, *C. veratri*, differt acervulis saepe griseo-albidis et conidiis (0–)1–2-septatis, saepe subrostratis vel rostratis.

Holotype: on *Veratrum album* (Melanthiaceae), Austria, Styria [Steiermark], Koralpe, 16 km W of Deutschlandsberg, *c.* 3.5 km N of the summit "Großer Speikkogel", along the path from the saddle E of the refuge Grillitschhütte down to the Bärentalalm, MTB 9155/4, 46°48'50"N/14°59'30"E, *c.* 1720 m alt.; tall herbs and smaller shrubs between *Alnus alnobetula*, 15 July 2004, C. Scheuer no. 4975 (GZU).
Isotype material distributed as Dupla Graecensia Fungorum no. 44 (SCHEUER 2007: 3) to BPI, HAL, M, WSP.

Leaf spots amphigenous, elliptical, somewhat irregular to oblong, 1–15 mm diam., sometimes confluent and forming large blotches up to 50 × 10 mm, pale to medium brown, centre later paler, greenish, greyish brown, finally greyish-white, occasionally somewhat zonate, margin indefinite or darker brown, sometimes with a diffuse dark halo. Mycelium internal. Conidiomata epiphyllous, rarely hypophyllous, slightly punctiform to pustulate, at first small, sporodochial, later large, acervular, subcircular, elliptical, or somewhat irregular to oblong in outline, epidermal, occasionally slightly subepidermal, greyish white, rarely brownish, 20–500 µm diam., sometimes confluent and up to 1000 µm diam., 10–50 µm thick, composed of a basal pseudoparenchymatous layer of swollen hyphal cells, 2–5 µm diam., isodiametric-globose, colourless to very pale ochraceous or brownish, thin-walled, giving rise to numerous densely arranged conidiophores, which are usually aseptate and reduced to conidiogenous cells, occasionally 1-septate, with an integrated, terminal conidiogenous cell, subcylindrical to slightly attenuated towards the apex, straight to slightly sinuous, 10–20(–25) × 2–5 µm, hyaline, thin-walled, smooth; conidiogenous cells holoblastic, usually unilocal, determinate, but probably also percurrent and sympodial, annellations and additional loci rather inconspicuous. Conidia solitary, fusiform to short obclavate, straight to mostly slightly to distinctly curved, falcate, sometimes with a straight lower part and curved apex, (15–)20–40 × 2–5 µm, (0–)1–2-septate, colourless, thin-walled, smooth, apex short subacute to acute or distinctly rostrate, i.e., gradually tapering into a relatively narrow beak with pointed tip, base truncate to short obconical-truncate, (1.5–)2(–2.5) µm wide.

Additional collections examined (paratype material):
On ***Veratrum album***: AUSTRIA, Niederösterreich: Reisalpe, Hinteralpe, 24 June 1905, leg. F. v. Höhnel; KABÁT & BUBÁK, Fungi imperfecti exsiccati 349 (HBG), as '*Fusarium veratri*'. — RUSSIA, Tambov, near Krasnaja Slobodka, 1 June 1910, leg. Schirajewsky; TRANZSCHEL & SEREBRIANIKOW, Mycotheca Rossica 200 (HBG), as '*Fusarium veratri*'. — SWITZERLAND, Graubünden: Saas, 22 July 1910, leg. O. Jaap (HBG), as '*Marssonina veratri*'. — GERMANY, Oberbayern: near Füssen, 24 August 1912, leg. H. Sydow, Mycotheca germanica 1142, p.p. (HBG), as '*Fusoma veratri*' (mixed with *Mycocentrospora veratri*). — [CZECH REPUBLIC], 'Hochsenke, Hochschar', 10 August 1924, leg. F. Petrak, Flora Bohemiae et Moraviae exsiccata, II. Ser., 1. Abt.: Pilze, Nr. 1925 (HBG), as '*Fusoma veratri*'.
AUSTRIA, Steiermark (Styria): Grazer Bergland, way from Teichalm to Hochlantsch, 1200–1400 m, 4 July 1974, leg. R. Stipacek (GZU, Scheuer no. 5116). — Schladminger Tauern, Kleinsölktal S of Gröbming, Sacherseealm, Schwarzenseebach, 1050 m, 5 July 1995, leg. C. Scheuer no. 5113 (GZU). — [Ybbstaler Alpen], WSW of Mariazell, between Vorderer Zellhut and Ochsenboden, northern slope of Feldhütl, ca. 1400 m, 16 July 1998, leg. C. Scheuer no. 5114 (GZU). — [Ybbstaler Alpen], ca. 5 km WSW of Mariazell, east slopes of Feldhütl, ca. 1250–1280 m, 16 July 1998, leg. C. Scheuer no. 5115 (GZU). — Schladminger Tauern, Kleinsölk-Obertal, N of Schwarzensee, Harmeralm, ca. 1170 m, 15 June 2001, leg. C. Scheuer no. 4201 (GZU). — Hochschwabgebiet, Aflenzer Staritzen, NW above Seebergsattel, 1650 m, 14 July 2001, leg. G. Heber (GZU, Scheuer no. 5110). — Hochschwabgebiet, Aflenzer Staritzen, N of Seebergsattel, 14 July 2001, leg. G. Heber (GZU, Scheuer no. 5111). — Hochschwabgebiet, Trenchtling, ca 2.7 km ESE of Hochturm, near to Keglanger shed, S of Roßboden, 23 July 2001, leg. G. Heber (GZU, Scheuer no. 5112). — Schneealpe, Grünkogel S of Windberg, ca. 1800 m, 2 August 2001, leg. G. Heber (GZU, Scheuer no. 5109).
On ***Veratrum lobelianum*** (≡ *V. album* subsp. *lobelianum*): [CZECH REPUBLIC], 'Fungi Bohemici', Riesengebirge, July 1910, leg. F. Bubák (HBG), as '*Fusarium veratri*'.

4. Discussion

Veratrum album is a European species distributed in the Alps, Pyrenees and Apennines (MEUSEL et al. 1965), whereas *V. lobelianum* (*V. album* subsp. *lobelianum*) is a submeridional-temperate, mainly subalpine Eurasian species. The two species are closely allied and belong, together with the North American *V. californicum*, in *Veratrum* subgen. *Veratrum* sect. *Veratrum* (ZOMLEFER et al. 2003). *V. californicum* is morphologically close to *V. album* and clustered in molecular sequence analyses together with the *V. album* complex (ZOMLEFER et al. 2003). The close affinity of the hosts is also reflected in the two morphologically very similar *Colletogloeum* taxa found on *V. album*/*V. lobelianum* and *V. californicum*. However, although closely allied, the two species are easily distinguishable by several morphological characters. *C. veratri-albi* differs from *C. veratri* in having greyish white conidiomata and (0–)1–2-septate, usually short rostrate conidia (*versus* conidiomata usually brown and conidia 0–1-septate, non-rostrate in *C. veratri*, see MORGAN-JONES & PHELPS 1995b). These differences, connected with distinct hosts and a geographical isolation, warrant the introduction of a new species for the fungus on *Veratrum album* and *V. lobelianum*. Most conidia of *C. veratri-albi* are 1-septate, but 2-septate conidia are not rare and have been found in all samples examined.

Although type material of *Marssonina veratri* f. *veratri-albi* is not preserved in Bäumler's herbarium at BP (Herbarium, Hungarian Natural History Museum, Budapest, *in litt.*), this taxon can undoubtedly be considered a synonym of *C. veratri-albi*. A description of this fungus was also published by WORONICHIN ('Mat. po mikol. i fitopatol. 3: 14, 1915', according to VASIL'EVSKIJ & KARAKULIN 1950). The host of this forma was given as *Veratrum album*, but certainly pertains to *V. lobelianum*. *V. album* s.str. is not distributed in the Caucasus region, whereas *V. lobelianum* (≡ *V. album* subsp. *lobelianum*) is a common species in this area (CZEREPANOV 1995). A collection from Russia and a sample on *V. lobelianum* from the Czech Republic agreed perfectly in all morphological details with the other specimens examined.

5. Acknowledgements

We are much obliged to T. Feuerer (Herbarium Hamburgense) for making it possible to examine herbarium specimens in his keeping, and to G. Heber (Graz) for his recent collections of *Colletogloeum veratri-albi* from Steiermark.

6. Literature

BRAUN U. 1991: Studies on *Ramularia* and allied genera (IV). - Nova Hedwigia 53: 291–305.

CZEREPANOV S.K. 1995: Plantae vasculares Rossicae et civitatum collimitanearum (in limicis URSS olim). - St. Petersburg: Mir i Semja.

ELLIS J.B. & EVERHART B.M. 1895: New species of fungi from various localities. - Proceedings of the Academy of Natural Sciences Philadelphia 1894: 322–386.

HOLLÓS L. 1902: Beiträge zur Kenntnis der Pilze des Kaukasus. - Növénytani Közlemények 1: 147–155.

MAGNUS P. 1906: Notwendige Umänderung des Namens der Pilzgattung *Marssonia* Fisch. - Hedwigia 45: 88–91.

MEUSEL H., JÄGER E. & WEINERT E. 1965: Vergleichende Chorologie der zentraleuropäischen Flora. - Jena: G. Fischer Verlag.

MORGAN-JONES G. & PHELPS R.A. 1995a: Notes on hyphomycetes. LXVIII. Concerning *Mycocentrospora veratri*, the causal organism of necrotic leaf-spot of *Veratrum* species (Liliaceae). - Mycotaxon 54: 67–74.

MORGAN-JONES G. & PHELPS R.A. 1995b: Notes on coelomycetes. V. Concerning *Marssonina veratri*, a leaf-spot causing fungus of *Veratrum californicum*, reclassified in *Colletogloeum*. - Mycotaxon 55: 215–221.

ONDŘEJ M. 1974: Mykofloristické poznámky I. *Centrospora* Neerg. - Česká Mykologie 28(3): 185–188.

PETRAK F. 1937: Verzeichnis der neuen Arten, Varietäten, Formen, Namen und wichtigsten Synonyme der Pilze 1922-1928. - Just´s Botanischer Jahresbericht 61: 291–297.

SCHEUER C. 2007: Dupla Graecensia Fungorum (2007, Nos 41–100). - Fritschiana (Graz) 58: 1–25.

VASIL'EVSKIJ N.I. & KARAKULIN B.P. 1950: Parazitnye nesovershennye griby. 1. Gifomicety. - Moskva, Leningrad: Izdatel'stvo Akademii Nauk SSSR.

ZOMLEFER W.B., WHITTEN W.M., WILLIAMS N.H. & JUDD W.S. 2003: An overview of *Veratrum* s. l. (Liliales: Melanthiaceae) and an infrageneric phylogeny based on ITS sequence data. - Systematic Botany 28(2): 250–269.

Fig. 1. Leaf of *Veratrum album* with lesions caused by *Colletogloeum veratri-albi* (phot. U. Braun).

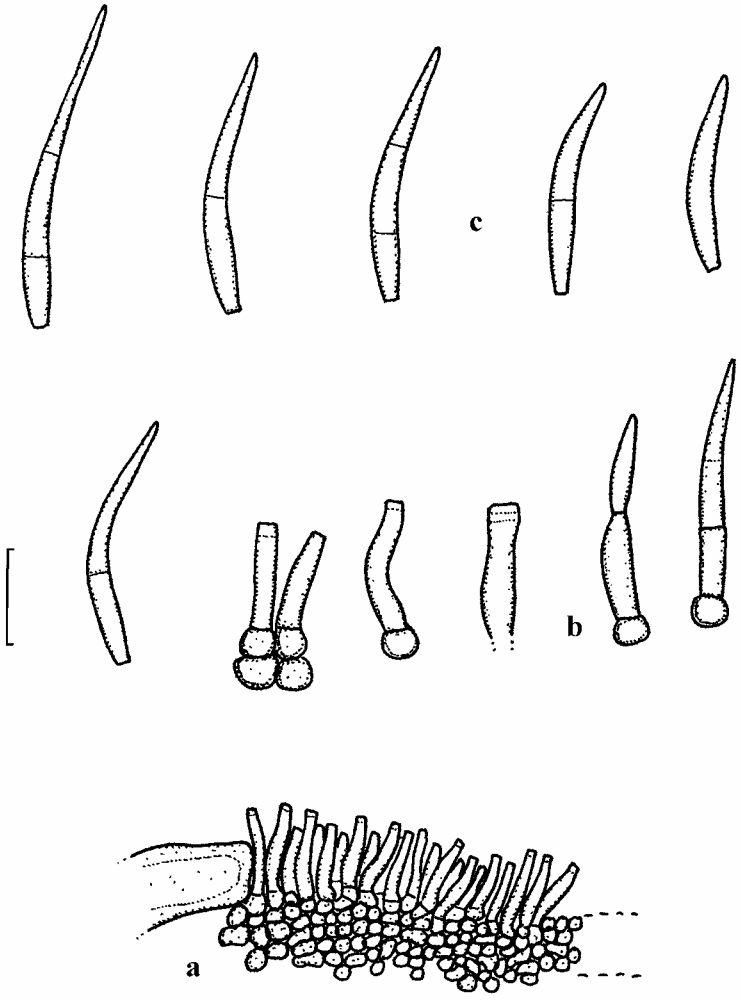

Fig. 2. *Colletogloeum veratri-albi* on *Veratrum album*: (a) part of an acervulus in section, with peridium and conidiophore layer, (b) conidiophores, (c) conidia (bar = 10 µm, U. Braun del.).

Notes on two collections of *Puccinia caricina* s.l. on *Carex hordeistichos* from Austria

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ZWETKO P. 2007: Notes on two collections of *Puccinia caricina* s.l. on *Carex hordeistichos* from Austria. - Fritschiana (Graz) 58: 35–38. - ISSN 1024-0306.

Two collections of *Puccinia caricina* s.l. on *Carex hordeistichos* from eastern Austria show considerable differences to other *Puccinia* taxa known on *Carex*. Contrary to earlier collections on this host, the two recent ones also contain several leaves bearing teleutosori. The teleutospores are conspicuously larger than those of any other species known in the *P. caricina* group, 52–80 × 17–30 µm (68 ± 7.8 × 23.6 ± 3.4 µm).

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Introduction. The sedge *Carex hordeistichos* Vill. shows a rather scattered area of distribution from North Africa and Southwest Europe eastward to the Volga and into Transcaucasia, western Iran, and northern Iraq. The largest part of this disjunct area comprises the Pannonian region (MEUSEL et al. 1965). The first rust record on *Carex hordeistichos* was published from Hungary under the name *Puccinia caricis* (Schum.) Rebent. (MOESZ 1940). Further records on this host were published from Bulgaria (HINKOVA 1981), Austria (ZWETKO 1993, SCHEUER 2006, 2007), and Turkey (HENDERSON 1964, BAHCECIOGLU & GJÆRUM 2003).
According to BAHCECIOGLU & GJÆRUM (2003), their collection from Turkey corresponds well to the description given by ZWETKO (1993) for the only specimen known from Austria at that time. This specimen from the Pannonian lowland area in Austria and the specimens from Turkey contain only uredosori. In the two most recent collections from Austria (SCHEUER 2006, 2007), also teleutosori are present. It must be noted here that these teleutosori are not very abundant and have therefore been concentrated in the specimens kept in the herbarium GZU (Institute of Plant Sciences, Graz).

Material and methods. Dried herbarium specimens were studied using standard light microscopy (Zeiss Axioskop 20). Spores were examined and measured in tap water.

Puccinia caricina DC. s.l., on *Carex hordeistichos* Vill. **Fig. 1**

Life-cycle unknown, probably a hemi-form. — **Uredosori** in yellow leaf spots, mostly hypophyllous, light rusty brown. Uredospores obovoid or ellipsoid, more rarely subglobose 26.5–36.5 × 21–32 µm (31.6 ± 2.4 × 26.6 ± 3.1 µm);

germ pores (2 -) 3 (- 4), equatorial, covered by a hyaline papilla; spore wall 2–2.5 µm thick, yellow-brown, echinulate, with colourless to yellowish contents. **Teleutosori** hardly larger than the uredosori, elongate, compact, blackish brown. Teleutospores 52–80 × 17–30 µm (68 ± 7.8 × 23.6 ± 3.4 µm), elongate-clavate, lower spore cell always much longer and narrower than the upper one, often twice as long, sometimes even longer; upper cell often subglobose(-globose); apex rounded or ± flattened, sometimes asymmetrical; spore wall smooth, chestnut-brown, *c.* 2 µm thick, at the apex up to 6–14 µm thick; germ pore of the upper cell close to the apex, but mostly somewhat lateral; pedicels firm and persistent, often not even half the length of the lower spore cell.

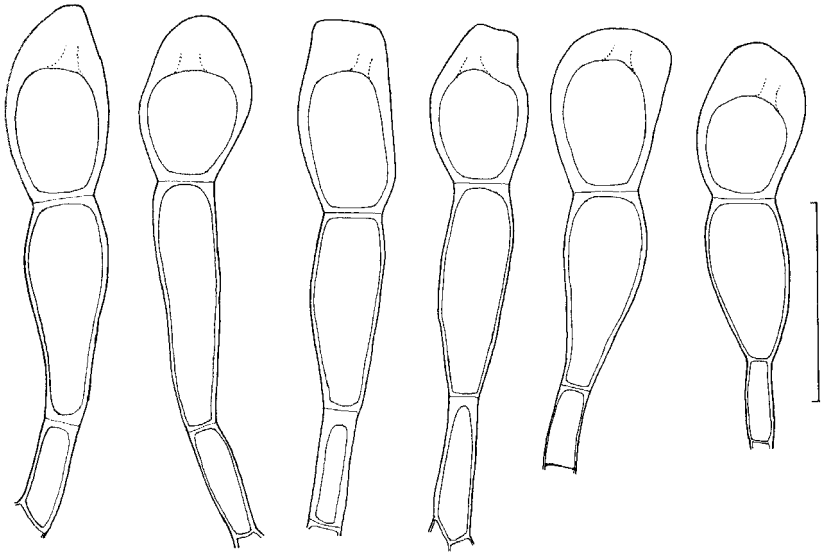

Fig. 1. Teleutospores of *Puccinia caricina* s.l. on *Carex hordeistichos*, Mycotheca Graecensis # 405, GZU (bar scale = 40 µm, C. Scheuer del.).

Material examined: AUSTRIA, Burgenland, SSW of Bruck an der Leitha, ENE of Kaisersteinbruch, NW of the landmark "Bäckerkreuz" (47°59'N/16°45'E), 160–180 m alt.; silty bank of a pool. 22 October 2005, leg. T. Barta, det. P. Zwetko, Mycotheca Graecensis # 405, GZU (SCHEUER 2006) [original label: Nordburgenland, Fuß des Leithagebirges: SSW von Bruck a. d. Leitha: schlammiges Ufer eines Tümpels NW vom Bäckerkreuz ENE von Kaisersteinbruch, 22. Oktober 2005, leg. T. Barta].
AUSTRIA, Lower Austria, Thermenlinie, *c.* 4 km SE of Berndorf, near St. Veit an der Triesting, along a forest path at the W foot of the hill "Pfarrkogel", MTB 8062/4, 47°55'N/16°09'E, 400–420 m alt.; wet clearing. 8 September 2002, leg. T. Barta, det. P. Zwetko, Dupla Graecensia Fungorum # 64, GZU (SCHEUER 2007) [original label: Niederösterreich, Thermenlinie: feuchte offene Stellen nahe einem Waldweg am W-Fuß des Pfarrkogels bei St. Veit a. d. Triesting, 8. September 2002, leg. T. Barta].

Discussion. The teleutospores of this rust on *Carex hordeistichos* differ considerably in size and shape from all other rusts united in the collective species *P. caricina*. The spores are quite similar to those of *P. paludosa*, especially because of the short pedicel and the conspicuous long lower spore cell. However, the teleutospores of the rust on *Carex hordeistichos* are still significantly longer. Not a single teleutospore shorter than 50 µm could be found in our two collections. On an average, the teleutospores on *Carex hordeistichos* are 68 ± 7,8 µm long, those of *P. paludosa* (on *Carex elata*) only 57.5 ± 7.5 µm (n = 30). According to GÄUMANN (1959), the microspecies *P. urticae-ripariae* Hasler has the largest teleutospores within *P. caricina* s.l., 36–78 × 13–25 µm (57.6 ± 7.3 × 17.4 ± 2.0 µm). However, ZWETKO (1993) suspects that Hasler's measurements might be somewhat questionable, due to a possible mixed infection with *P. paludosa*.

Comparison of the measurements given for teleutospores of *P. caricina* s.l. in three examples from standard literature:

MAJEWSKI (1979)	30–70 × 12–25 µm
WANG & ZHUANG (1998)	35–70 × 12–25 µm
SAVILE (1964)	(20–)38–63(–70) × 12–24 µm

P. caricina sensu MAJEWSKI (1979) comprises species alternating between *Ribes* and *Carex*, *Pedicularis* and *Carex*, as well as *Urtica* and *Carex*, i.e., *P. caricina* DC. sensu ZWETKO (1993; Syn. *P. pringsheimiana* Kleb. sensu SAVILE 1973, *P. ribesii-caricis* Kleb.), *P. paludosa* Plowr., and *P. urticata* Kern (Syn. *P. urticae-caricis* Kleb.). WANG & ZHUANG (1998) also include *P. limosae* Magnus, a species alternating between *Lysimachia* and *Carex*. SAVILE (1964) took *P. caricina* in approximately the sense of ARTHUR (1934, as *P. caricis*), including all *Carex* rusts infecting *Ribes* and *Urtica*. However, as the aeciospore wall ornamentations differ substantially in these two groups, the same author later decided that they should be treated as two separate species (SAVILE 1973).
Which aecial host could be attacked by this rust on *Carex hordeistichos*, or whether the rust lost its heteroecious lifestyle, is still unknown.

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References

ARTHUR J.C. 1934: Manual of the rusts in United States and Canada. Illustrations and a new supplement by Professor George B. CUMMINS (1962). - New York: Hafner Publishing Company.

BAHCECIOGLU Z. & GJÆRUM H.B. 2003: New and rare rust fungi (Uredinales) from Anatolia (Turkey). - Mycotaxon 85: 165–173.

GÄUMANN E. 1959: Die Rostpilze Mitteleuropas mit besonderer Berücksichtigung der Schweiz. - Beiträge zur Kryptogamenflora der Schweiz 12, 1407 pp. - Bern: Büchler & Co.

HENDERSON D.M. 1964: Uredinales from S.W. Asia: III. The rust fungi of Turkey. - Notes from the Royal Botanic Garden Edinburgh 25: 197–277.

HINKOVA C.H. 1981: Materials on the rust flora in Bulgaria. II [in Bulgarian]. - Fitologiya 17: 58–69.

MAJEWSKI T. 1979: Flora Polska. Grzyby (Mycota). Tom XI. Podstawczaki (Basidiomycetes), Rdzawnikowe (Uredinales) II, 463 pp., 2 tabl. - Warszawa, Kraków: Państwowe Wydawnictwo Naukowe.

MEUSEL H., JÄGER E. & WEINERT E. 1965: Vergleichende Chorologie der zentraleuropäischen Flora. - Jena: VEB Gustav Fischer Verlag.

MOESZ G. 1940: Fungi Hungariae, IV. Basidiomycetes. Pars 1. Uredineae. - Annales Musei Nationalis Hungarici, Pars Botanica, 33: 127–200.

SAVILE D.B.O. 1964: *Puccinia karelica* and species delimitation in the Uredinales. - Canadian Journal of Botany 43: 231–238.

SAVILE D.B.O. 1973: Aeciospore types in *Puccinia* and *Uromyces* attacking Cyperaceae, Juncaceae and Poaceae. - Reports of the Tottori Mycological Institute 10: 225–241.

SCHEUER C. 2006: Mycotheca Graecensis, Fasc. 21 (nos 401–420). - Fritschiana (Graz) 54: 1–9.

SCHEUER C. 2007: Dupla Graecensia Fungorum (2007, nos 41–100). - Fritschiana (Graz) 58: 1–25.

WANG Yunchang & ZHUANG Jianyun 1998: Flora Fungorum Sinicorum. Vol. 10. Uredinales (I), 335 pp. - Beijing: Science Press.

ZWETKO P. 1993: Rostpilze (Uredinales) auf *Carex* im Ostalpenraum. Ein neues Artenkonzept. - Bibliotheca Mycologica 153, 222 pp. - Berlin, Stuttgart: J. Cramer.

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SCHEUER C. 2006: Dupla Graecensia Fungorum (2006, Nos 1–40). - Fritschiana (Graz) 54: 10–24.

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