Rare and new Laboulbeniales from Poland, V

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In this work new species parasitizing on Coleoptera (Cucujomyces rotundatus sp. n. on Silvanus unidentatus, Hydrophilomyces gracilis sp. n. and H. hamatus sp. n. on Cercyon spp.), Dermaptera (Hesperomyces forficulae sp. n.) and Acarina (Rickia polonica sp. n.) are described. The localities of four species new for Poland are given.

Cucu jomyces rotundatus sp. n.

Cellula basalis receptaculi indistincta, cellula subbasalis lutescens, paulo longior quam latior, in parte posteriore appendicem primariam et in parte anteriore cellulam pedunculi perithecii producit. Appendix primaria simplex, ex cellulis hyalinis, elongatis saepe ± destructis constructa est. Cellula pedunculi perithecii lutescens, tam longa quam lata vel paulo longior. Regio cellularum basalium atque perithecium fuscum nigro colore suffusum attamen apex hyalinus est. Perithecium aspectu frontali et dorsali ovatum, breve et compactum repente se angustans in brevi ac crasso collo perithecii, plano apice cum parviis labiis finiti. Collum perithecii a latere visum paulo retro arcuatum est. Axes receptaculi secundarii fusci nigro colore suffusi atque opaci, ex 5 raro ex 4 cellulis compositi, deorsum arcuati et connexi infra unquem qui plane ab eis circumcinctus est. Cellulae primae a parte posteriore appendices reniformas ac opacas atque appendices ex multis, izodiametris ac flavis cellulis compositas producunt. Hae appendices longiores quam perithecium sunt, et in parte inferiore proxima anteriori, perithecium circumcingunt atque simplices sunt vel duobus brevibus ramulis vel antheridiis rectis finiuntur. Cellulae secundae et tertiae receptaculi secundarii appendices hyalinas vel flavas ac liberas producunt, quarum cellulae basales fuscae nigro colore suffusae, opacae et elongatae atque receptaculo adherentes sunt. Hae appendices simplices sunt vel primae earum duobus vel tribus antheridiis vel ramulis sterilibus finiuntur. Cellulae quintae receptaculi secundarii appendices liberas, rectas, flavas vel hyalinas producunt.

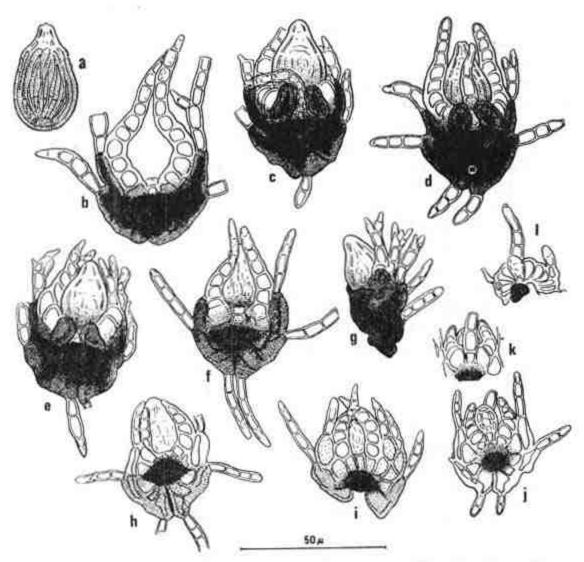
Perithecium maturum 33×22 µ, receptaculum cum cellulis basalibus appendicium lateralium 33-40 µ latum, appendices laterales et inferiores ad 28 µ longae, appendices circumcingentes perithecium ad 60 µ longae, longitudo tota ad apicem perithecii (sine appendicibus inferioribus) 45-53 µ.

Basal cell of the receptacle indistinct, the subbasal cell yellowish, slightly longer than broad, bearing posteriorly the primary appendage, and anteriorly the stalk-cell of the perithecium. The primary appendage unbranched, consisting of hyaline, elongated cells, often more or less destroyed. The stalk-cell of the perithecium yellowish, not longer than broad or somewhat longer. Basal cell region and the body of the mature perithecium dark brown, the tip hyaline. The perithecium in dorsal and ventral view ovate, short and stout, tapering rapidly to the short, broad tip and flattish apex with small lips. The tip is somewhat bent posteriorly in the lateral view. The axes of the secondary receptacle curved downward and connected below the foot, which is completely surrounded by them, dark brown, opaque, consisting of five, rarely four cells. The first cells bearing posteriorly the reniform, opaque upgrowths and the appendages consisting of numerous, isodiametric, yellowish cells. These appendages are longer than the perithecium, in the lower part surrounding somewhat anteriorly the perithecium, simple or terminated by two short branchlets or simple antheridia. The second and third cells of the secondary receptacle bearing free, yellowish or hyaline appendages, the basal cells of which are dark brown, opaque, elongated and adhering to the receptacle. The appendages are simple or the first is terminated by two or three antheridia or sterile branchlets. The fifth cells of the secondary receptacle bearing simple, yellowish or hyaline, free appendages.

Mature perithecium $33\times22~\mu$, receptacle with basal cells of the lateral appendages $33\text{--}40~\mu$ broad, lateral and lower appendages up to $28~\mu$ long, appendage surrounding the perithecium up to $60~\mu$ long, total length to the tip of the perithecium of the maturating individuals (without lower appendages) $45\text{--}53~\mu$.

On Silvanus unidentatus Fabr. (Coleoptera, Silvanidae): Puszczykowo near Poznań, xerotermic hill-side by section 53 of the forest of the Wielkopolski National Park, under the bark of an old Ulmus in the feeding ground of Scolytus scolytus F. and S. multistriatus Marsh. (Scolytidae), 12. 5. 1971 leg. S. Bałazy (TM. 1189-1200, 1190 — holotype). Fig. 1.

Numerous specimens of this fungus covered all parts of the body of the host including legs, antennae and eyes. The specimens were of va-



Pig. 1. Cucujomyces rotundatus sp. n. on Silvanus unidentatus, Puszczykowo; a — mature perithecium, anterior view; b — mature individual without perithecium, anterior view (a, b — holotype); c, d — maturating individuals with primary appendage, posterior view; e — maturating individual with antheridia, posterior view; f — maturating individual with well developed lateral and lower appendages, anterior view; g — maturating individual with antheridia, lateral view; h — young individual showing clearly defined cells of secondary receptacle, anterior view; i — anterior view of young individual; the axes of the secondary receptacle not connected below the foot; j — young individual, posterior view; k — anterior view of the upper part of the same individual showing the primary appendage; l — very young individual with primary appendage and rudiment of perithecium; the axes of secondary receptacle are yet not connected

rious ages: some young ones (Fig. 1 h-l), most had a well-developed receptacle and a maturing perithecium (Fig. 1 c-g). There were also old specimens with a torn-off perithecium. Only one specimen with a fully mature perithecium with developed spores (Fig. 1 a, b) was found. During preparation the perithecium became separated from the rest of the thallus.

The structure of this peculiar fungus is closest to the genus Cucujomyces Spegazzini, of which 10 species have been described in South America and one in New Zealand (Benjamin 1968). In some species from this genus such as Cucujomyces goniocoeli Thaxter (Thaxter 1931 p. 179 pl. 43: 5) and C. elegantissimus (Speg.) Thaxter (Spegazzini 1917 p. 671 Fig. 203, Thaxter 1931 p. 179) a similar receptacle may be found forming an almost complete circle around the base. Single antheridia on the tips of secondary appendages are also characteristic for this genus. The new species, however, differs considerably from the hitherto described species of Cucujomyces (listed by Thaxter 1931 and Benjamin 1968) by the following characters: a small size, a relatively small and but slightly elongated stalk-cell of the perithecium, a short and broad perithecium, dark, elongated and growing together with the secondary receptacle basal cells of the lateral and lower appendages, the whole secondary receptacle dark and opaque and the occurrence of dark, kidney-shaped upgrowths on the posterior side.

The host of Cucujomyces rotundatus, Silvanus unidentatus, belongs to a family which is closely related to the Cucujidae.

Herpomyces ectobiae Thaxter

On Blattella germanica (L.) (Blattodea, Blattidae): Warszawa, in the Institute of Fermentation Industry, 31.7.1973 leg. D. Zdziennicka (TM. 1201-1205).

The found specimens agree to a great extent with the descriptions and figures of Thaxter (1908 p. 289 pl. 39: 11-16), Spegazzini (1917 p. 548 Fig. 90) and the microphotographs of Richards and Smith (1955 Figs. 4-6).

Herpomyces ectobiae is known from North, Central and South America, from Asia and Africa (Thaxter 1908, 1931) and from Europe (Picard 1913).

Hesperomyces forficulae sp. n.

Habitus hyalinus flavo colore suffusus. Cellula basalis receptaculi paulo longior quam latior, ad basim angustatur, cellula subbasalis latior quam longior, in apice rotundata est. Appendix libera, cellula inferior 2,5-4 × longior quam latior, opaca, fusca nigro colore suffusa, excepta parte distante, et alteram cellulam subterminatim producens. Cellula altera brevior quam prima cellula, in fine cum uno vel rarius cum duobus vel tribus antheridiis ampuliformis. Appendix leviter arcuata versus perithecium. Cellula pedunculi perithecii complanata ac saepe indistincta. Cellulae basales complanatae ac dintinctae. Perithecium elongatum ad apicem angustatur usque ad brevem partem apicalem cum duobus par-

vulis collinis in margine exteriore et cum duabus subsigmoideis appendicibus. Apex atque appendices laterales luteae fusco colore suffusae. Margo externa perithecii ad extra convexa praecipue in parte inferiore, attamen margo interna paene recta.

Perithecium cum cellulis basalibus 75-103 \times 20-25 μ , ramus anteridialis 35-56 μ longus, appendices in perithecio 12-15 μ longue, receptaculum 23-28 μ longum, longitudo tota 100-135 μ .

Yellowish-hyaline. Basal cell of the receptacle somewhat longer than broad, tapering to the foot, the subbasal cell broader than long, rounded above. The appendage free, the lower cell 2,5-4 times longer than broad, opaque, brown-black except the distal end, bearing the second cell subterminally. The second cell of the appendage shorter than the first cell, on the distal end with one or rarely two or three flask-shaped antheridia. The whole appendage is slightly bent toward the perithecium. The stalk-cell of the perithecium flattened, often indistinguishable. The basal cells flattened, clearly defined. The perithecium elongated, tapering distally to the short apex with two small humps on the outer margin and

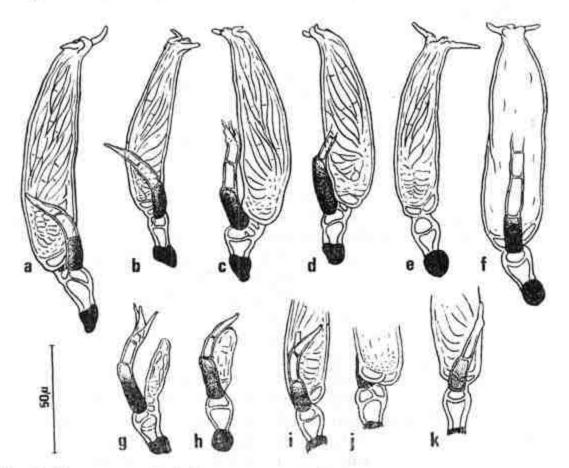


Fig. 2. Hesperomyces forficulae sp. n. on Forficula auricularia, Warszawa—Marymont; a-e — mature individuals (a — holotype); f — old individual; g, h — young individuals; i, j — portion of mature individuals showing receptacle, stalk-cells, basal cells, part of perithecium and appendage

with two lateral subsigmoid appendages. The apex and terminal appendages brownish-yellow. The outer margin of the perithecium convex, especially in the lower part, the inner nearly straight.

Perithecium, including basal cells $75\text{--}103\times20\text{--}25~\mu$, the antheridial branch $35\text{--}56~\mu$ long, appendages on the perithecium $12\text{--}15~\mu$ long, receptacle $23\text{--}28~\mu$ long, total length $100\text{--}135~\mu$.

On Forficula auricularia L. (Dermaptera, Forficulidae): Warszawa — Marymont, in a small garden near the Vistula, 6.8.1973 leg. T. Majewski (TM. 1334 — holotype, 1335). Fig. 2.

This is the first species of the genus Hesperomyces Thaxter parasitizing on a member of the Dermaptera. Of the remaining six species four parasitize beetles from the family Coccinellidae, one (H. catopii Thaxter) on a beetle from the family Mycetophagidae and one (H. lasiochili Thaxter) on a member of the family Anthocoridae (Hemiptera). All differ from the newly described species by the shape of the cells of the appendage, the lower of which is never opaque in any of the known species. The closest species to Hesperomyces forficulae seems to be H. coccinelloides Thaxter (Thaxter 1931 p. 110 pl. 18: 11-14); it has a similar, relatively short receptacle and a slender appendage with few antheridia (1-3).

This species was found in many specimens on the antennae of a female.

Hydrophilomyces gracilis sp. n.

Habitus hyalinus vel lutescens. Receptaculum longum, leviter vel valde arcuatum ad basim angustatur, ex circa 20-40 cellulis compositum. infra perithecium una supra aliam positis. Hae cellulae in parte inferiore receptaculi latiores quam longiores sunt, attamen in parte superiore saepe paulo longiores quam latiores sunt. Axis perithecii continuatio axis receptaculi est. Cellula pedunculi perithecii latior quam longior, cellulae vero basales parvae et indistinctae sunt. Perithecium longum, angustum, paulo arcuatum cum indistincto collo paene tam longum quam venter, qui usque ad apicem rotundatum gradatim angustatur. Cellula externa parietis perithecii infra collum perithecii prominantiam distinctam ac rotundatam format. Saepe primordium perithecii secundarii in parte mediali receptaculi invenitur. Appendix similis receptaculo, paulo lateralis, brevior quam perithecium maturum ad summum ex 18 cellulis constructa est. Cellulae, excepta cellula infima, latiores quam longiores sunt, in parte superiore appendicis cum una vel duabus parvis cellulis, quae oblique divisae sunt in finibus superioribus ex quibus antheridia vel breves vel longiores ramuli oriuntur.

Longitudo tota 225-355 μ, perithecium 100-165×23-27 μ, receptacu-

lum 10-16 μ latum in parte media, 130-210 μ longum, appendix ad 125 μ longa, 8-13 μ lata.

Hyaline or slightly yellowish. Receptacle long, slender, slightly or strongly curved, somewhat narrower below, consisting of about 20-40 superposed cells below the perithecium; they are broader than long in the lower part of the receptacle and often rather longer than broad in the upper part. Axis of the perithecium coincident with that of the receptacle. The stalk-cell broader than long, the basal cells small, indistinct. The perithecium long, slender, somewhat bent and slightly differentiated, with indistinct neck nearly as long as the venter tapering slightly to the rounded apex. The outer wall-cell form below the neck a distinct, rounded prominence. Often there is a primordium of the second perithecium in the middle of the receptacle. Appendage similar to the receptacle, somewhat laterally, shorter than the mature perithecium, from no more than 18 cells. The cells except of the lower cell broader than long, in the upper part of the appendage with one or two small cells obliquely separated at the distal angles, giving rise to the antheridia or short or longer branchlets.

Total length 225-355 μ , perithecium 100-165 \times 23-27 μ , receptacle 10-16 μ wide (in the middle part), 130-210 μ long, appendage up to 125 μ long, 8-13 μ wide.

On Cercyon granarius Er. (Col., Hydrophilidae): Kurzeszyn Nowy, Rawa Mazowiecka county, on flooded meadows near the Rawka River, 18.8.1972 leg. T. Majewski (TM. 1075, 1076—holotype); as previously, in remnants carried by water from the meadows near the Rawka River, 19.8.1972 (TM. 1081); on Cercyon tristis Illig., as previously, 19.8.1972 (TM. 1080). Fig. 3.

So far five species described by Thaxter and Spegazzini (Thaxter 1931 p. 321-323) are included in the genus Hydrophilomyces. The new species differs considerably by the shape of its perithecium from Hydrophilomyces rhynchophorus Thaxter and H. reflexus Thaxter, by the occurrence of only one perithecium and by its shape from H. coelostomalis Thaxter (the perithecia of H. coelostomalis are less slender), and by a long receptacle composed of 20-40 cells from H. rhytidopus (Speg.) Thaxter (which has only 5 cells of the receptacle under the perithecium), and from H. major (Speg.) Thaxter by the shape of the receptacle cells, which are not strongly flattened.

This fungus was found on the ends of the elytra of Cercyon granarius (about 20 specimens) and one immature specimen at the end of the abdomen of C. tristis. Its description needs to be supplemented by the characters of the appendage as no young specimen with an intact appendage was found.

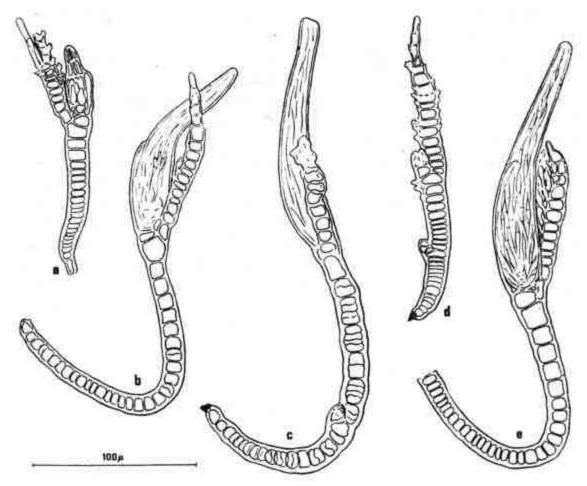


Fig. 3. Hydrophilomyces gracilis sp. n., Kurzeszyn Nowy; a — young individual on Cercyon tristis; b, c, e — mature individuals on Cercyon granarius (b — holotype); d — young individual on Cercyon granarius

Hydrophilomyces hamatus sp. n.

Habitus flavus. Receptaculum longum, paene rectum, in tota altitudine eandem diametrum habens, ex circa 18-23 cellulis sub receptaculo una supra alia positis, constructum est. Cellula infima formam trianguli habet et angustior quam ceterae est, quae apud individua tenera compressae sunt, apud vero matura etiam compressae vel praecipue in parte superiore receptaculi—tam longae quam latae sunt. In parte inferiore receptaculi una vel rarius duae cellulae elongatae ac sustinentes sunt, nonnunquam absunt. Cellula pedunculi perithecii latior quam longior, cellulae vero basales parvae ac indistinctae sunt. Perithecium longum, angustum cum parum apparenti ventre perithecii. Collum longius quam venter perithecii, valde arcuatum et usque ad leviter distinctam partem apicalem et apicem compressum angustatur. Cellula externa parietis perithecii in externa vel interna margine perithecii distinctam ac rotundatam prominentiam format. Appendix similis receptaculo, apud individua

matura paulo lateralis est, ad summum ex 35 cellulis composita est. Cellulae excepta cellula infima compressae sunt, in parte superiore appendicis cum parvis cellulis ab una vel utraque parte se separantibus exquibus antheridia oriuntur.

Longitudo tota 270-420 μ (excepta parte arcuata), perithecium 200-280×35-43 μ, receptaculum 195-250 μ longum et 20-28 μ in parte media latum, appendix ad 150 μ longa et 18-26 μ lata.

Yellowish. Receptacle long, nearly straight and uniform in diameter, consisting of about 18-23 superposed cells below the perithecium. The lower cell triangular and narrower than remaining, which in young thalli are flattened, in mature flattened or - especially in the upper part of receptacle - as long as broad. One or rarely two basal elongated buffer cells are in the lower part of the receptacle, but sometimes they are absent. The stalk-cell of the perithecium broader than long, the basal cells small, indistinct. The perithecium long, slender, with slightly differentiated venter; the neck longer than the venter, strongly recurved, tapering to the slightly distinguished tip and flattish apex. The external wall-cell forms a distinct rounded prominence on the external or inner margin of the perithecium. Appendage similar to the receptacle, somewhat laterally in the mature specimens, from no more than 35 cells. The cells (except the lower cell) are flattened, in the upper part of appendage with small cells separated from one or two sides, giving rise to the antheridia.

Total length 270-420 μ (excluding the recurved portion), perithecium 200-280 \times 35-43 μ , receptacle 195-250 μ long, 20-28 μ wide in the middle part, appendage up to 150 μ long, 18-26 μ wide.

On Cercyon bifenestratus Küst. (Col., Hydrophilidae): Pomiechówek, Nowy Dwór Mazowiecki county, in mud on the left bank of the River Wkra, 13.6.1973 leg. T. Majewski (TM. 1300, 1301 — holotype). Fig. 4.

This species differs from the hitherto described representatives of the genus Hydrophilomyces by the buffer basal cells and the strongly recurved neck of the perithecium. These characters distinguish it from Hydrophilomyces gracilis described in this work. It is also larger than this species and has less cells in the receptacle. The last character and the lesser thickness of the receptacle and the appendage makes distinguishing even young specimens (with undeveloped perithecia) of the two species easy. This is of significance as both species may occur on the same specimen of the host. Among the many specimens of various ages of Hydrophilomyces hamatus from Cercyon bifenestratus there are also some small immature individuals. The most, but not quite mature specimen (Fig. 4 f) on the basis of the characters described above may be assigned to Hydrophilomyces gracilis.

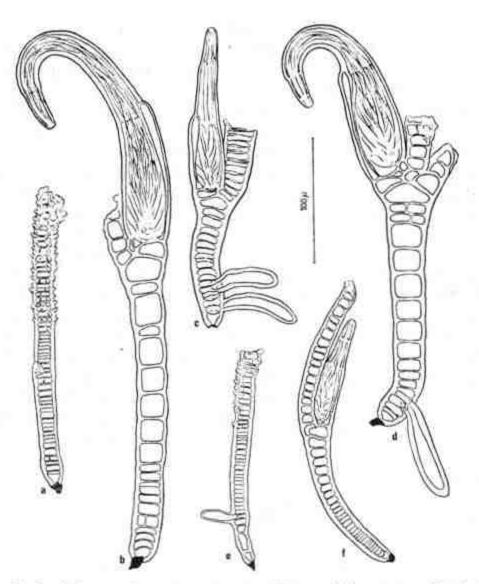


Fig. 4. Hydrophilomyces hamatus sp. n. on Cercyon bifenestratus, Pomiechówek;
a — young individual with well developed appendage;
b — mature individual without buffer cells (holotype);
c — individual with immature perithecium and two buffer cells;
d — mature individual with abnormal (double) appendage and one buffer cell;
e — young individual with buffer cell;
f — individual resembling Hydrophilomyces gracilis

This fungus was found on the mesothorax and metathorax of the host, only three young specimens were found at the end of the abdomen. Similarly as in the case of *H. gracilis* no specimen with a complete appendage was found.

Rickia polonica sp. n.

Habitus flavus et compactus. Cellula basalis receptaculi pedicellum expresse distinctum aliquoties longius quam latius format. Receptaculum triseriale. Series anterior ex tribus vel quattuor, raro ex quinque cellulis,

saepe izodiametris formata, quae 1-2 raro 3 parvas cellulas appendiculatas separant. In summa cellula appendiculata saepe antheridium normale invenitur. Series media ex 7-8 cellulis formata, cellulae inferiores rotundatae, attamen duae superiores saepe compressae sunt et una proxima alteri in eadem altitudine sitae sunt. Duae cellulae infra basim perithecii sitae sunt. Series posterior ex 11-15 cellulis formata, cellulae inferiores izodiametrae sunt, ceterae plusve minusve compressae, attamen 3-6 cellulae superiores compressae sunt et pseudoappendicem cellularem ac liberam formant; cellula distalis in apice rotundata et apice primario finita. Cellulae infra pseudoappendicem unam vel duas cellulas appendiculatas separant. Perithecium asymmetrum, ovatum, margo eius externa paene recta, attamen margo interna infra partem apicalem in libero spatio paene horizontalis est. Pars apicalis expresse distincta, apex latus cum duobus indistinctis labiis, quorum externum maius est quam internum. Antheridia angusta, colla paulo distincta. Appendices breviores quam antheridia, utraque cum distinctis infuscis saeptis.

Perithecia 50-73 µ, altitudo tota 115-170×50-85 µ.

Yellowish, compact. The basal cell forming a rather abruptly distinguished pedicel, several times longer than broad. Receptacle triseriate. The anterior series of three or four, rarely five cells, which are usually isodiametric and separating one or two, rarely three small appendiculate cells. The upper appendiculate cell bears usually a normal antheridium. The median series of seven to eight cells, the lower rounded, the upper two are often flattened and are next to each other on the same level; the two cells lie below the base of the perithecium. The posterior series of 11-15 cells, the lower are isodiametric, the remaining less or more flattened, the upper three to six cells are flattened and form a free cellular pseudoappendage, the distal cell of which is rounded and terminated by the primary appendage. The cells below the pseudoappendage separating one or two appendiculate cells. The perithecium unsymmetrically ovate, the outer margin nearly straight, the inner margin below the tip on the free distance almost on a level. The tip well distinguished, the apex broad, with two indistinct lips, the outer of which is greater than the inner. Antheridia slender, the necks not abruptly distinguished. Appendages shorter than antheridia, both with distinct dark septa.

Perithecia 50-73 \times 23-38 μ , total dimensions 115-170 \times 50-85 μ .

On Macrocheles sp. (M. glaber Müller?) (Acarina, Gamasidae, Macrochelidae): Bialowieża National Park (Hajnówka county), in horse manure by a road thorough Querco-Carpinetum in section 340, 22.5.1973 leg. T. Majewski (TM. 1261-1263); as previously in section 369 (TM. 1264-1266, 1264 — holotype). Fig. 5.

Among the species of Rickia parasitizing on Acarina hitherto described some slightly resemble Rickia polonica even though they differ

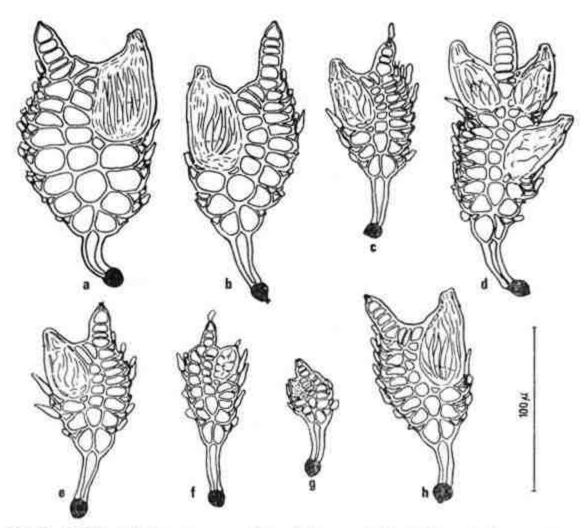


Fig. 5. Rickia polonica sp. n. on Macrocheles sp., Bialowieża; a, b, h — mature individuals (a — holotype); c, e — individuals with immature perithecia; d — abnormal individual with three perithecia; f, g — young individuals

from it by a simpler structure and smaller dimensions (Rickia hypoaspitis Thaxter, R. excavata Thaxter, R. coprights Speg.). The slightly similar Rickia spathulata Thaxter differs by strongly flattened cells of the receptacle, a short cellular appendage and an outwardly curving perithecium tip.

The most similar species is Rickia Jacobsonii Speg. (Spegazzini 1915 p. 508 Fig. 48; Thaxter 1926 p. 479 pl. 9: 157-158) described in Sumatra on an undetermined mite and in Java on mites from the genus Megalaelaps. It differs from Rickia polonica by the occurrence of appendiculate cells on the cellular appendage, and by almost symmetrical perithecium. It is slightly larger — the length according to Spegazzini is $175-200~\mu$, according to Thaxter up to $210~\mu$. Judging by the descriptions and figures Rickia sumatrensis Sibilia (Sibilia 1927 p. 87 Fig. 2) is probably a synonym of Rickia Jacobsonii.

Fairly numerous specimens of the described fungus occurred on the whole lower surface of the host's body, including the legs. The variability of the investigated specimens was slight, individuals with 2 or 3 perithecia are rare (Fig. 5 d).

Rickia uncigeri Scheloske

On Unciger foetidus (C. L. Koch) (Diplopoda, Julidae): Warszawa — Marymont, in a small garden near the Vistula, 10.8.1973 (TM. 1341-1344).

Fairly numerous specimens of this fungus in various stages of development grew out on mainly the front part of the host's body: on the appendages and the ventral part of the thorax, less abundantly on the lateral and dorsal parts of the thorax. Their characters agree to a great extent with those of Scheloske's diagnosis (1969 p. 147 Figs. 45-47). The dimensions were: length 190-260 μ , perithecia 85-114 \times 22-33 μ .

This locality is the second one reported for this species.

Stigmatomyces crassicollis Thaxter

On Leptocera sp. (Diptera, Sphaeroceridae): Kurzeszyn Nowy, Rawa Mazowiecka county, in a cellar, 20.6.1972 (TM. 997-1000). Fig. 6.

The numerous specimens of this fungus found on four flies differ considerably from Stigmatomyces pedunculatus Majewski (Majewski 1972) described previously in Poland by a different shape and placement of the basal cells of the perithecium and the stalk-cells. The apex of the perithecium tapers more strongly and has four very small lips.

The specimens found in Kurzeszyn and having the above-mentioned characters show considerable variation. The total length of mature specimens is (150-) 200-416 μ, perithecium (88-) 150-280 × (25-) 33-53 μ; the axis of the appendage (43-) 60-90 μ, consisting of (6-) 8-13 (-16) cells. Besides very considerable differences in the size of adult specimens there are other differences: smaller specimens (fig. 6 d-f) have relatively thin cell walls of the receptacle and stalk-cells, and the cells of the axis of appendage are less numerous, thin-walled and slightly flattened. Larger specimens (Fig. 6 a-c) have strongly thickened lateral cell walls of receptacle and stalk-cells and strongly flattened cells of the axis of the appendage. However, there is no sharp boundary between the two types. The investigated specimens form a series of transitory forms between two poles of variability, thus it appears that they should be treated as one very variable species.

This fungus—or at least its larger specimens—is very close to Stigmatomyces crassicollis Thaxter (Thaxter 1931 p. 120-121 pl. 22: 1-2) described from Jamaica. The dimensions of S. crassicollis: length 330-380 μ , perithecia 200-350 \times 42-54 μ , appendage 40-66 μ —correspond

fairly well to the larger specimens from Poland. Thaxter's diagnosis does not include the variability of this species which is singularily considerable.

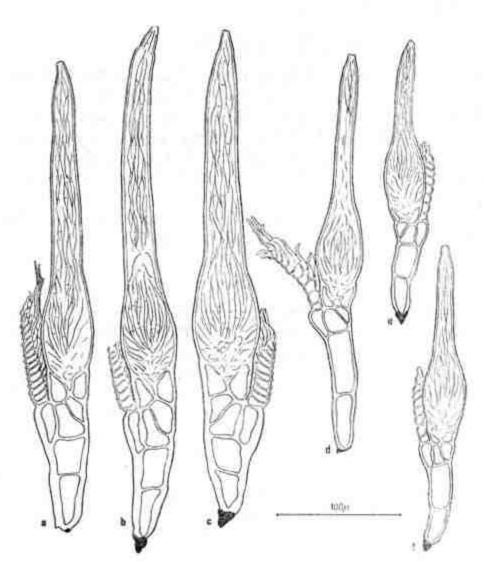


Fig. 6. Stigmatomyces crassicollis Thaxter on Leptocera sp., Kurzeszyn Nowy; mature individuals

Thaxter (l. c.) gives Stigmatomyces papuanus Thaxter var. leiostoma Maire (Maire 1920 p. 137 Fig. 4) from Algeria as a synonym of Stigmatomyces crassicollis. This fungus indeed closely resembles the Polish specimens (e.g. Fig. 6 b). It differs from them somewhat by the shape of the basal cells of the perithecium, as can be seen in Maire's drawing.

The host of the Polish specimens of Stigmatomyces crassicollis— Leptocera sp.—is, according to Dr. Nowakowski, a different species from the host of Stigmatomyces pedunculatus Majewski.

Symplectromyces vulgaris (Thaxter) Thaxter

On Quedius collaris Er. (Col., Staphylinidae): Bereżki, Ustrzyki Dolne county (Bieszczady Mts.), in bedding in alder thicket on the banks of the Bystry stream (650 m), 11.9.1972 (TM. 1111): as previously, in bedding in a beech forest on the right bank of Wołosaty stream (650 m), 15.9.1972 (TM. 1117); on Q. fulgidus F.: Kurzeszyn Nowy, Rawa Mazowiecka county, in a cellar, 13.6.1972 (TM. 991); as previously, 15.6.1972 (TM. 992); on Q. mesomelinus Mrsh.: as previously, 18.8.1972 (TM. 1070, 1071); on Q. xanthopus Er.: as previously, 20.6.1972 (TM. 993).

The specimens from Kurzeszyn are in agreement with the description and drawing of Thaxter (1908 p. 315 pl. 50: 14-16), Middelhoek (1943) and Benjamin (1968a); their length is 260-690 μ . Considerable variation in length is due to different degrees of elongation of stalk-cells and basal cells and of the perithecium itself. Not very numerous specimens from Bieszczady Mountains are shorter, 250-350 μ long, and darker.

I thank Prof. Dr. J. Boczek for determining a member of Acarina, Doc. Dr. K. Galewski for determining beetles from the family Hydrophilidae, Dr. J. T. Nowakowski for determining Diptera and Prof. Dr. A. Szujecki for determining Staphylinidae. The representative of the family Silvanidae was determined by Doc. Dr. S. Balazy, to whom I am grateful for presenting me with the infected insects.

Corrigendum

The names of hosts of Laboulbenia slackensis Cép. et Pic. and Rhachomyces Vayssierei Lepesme which were mentioned in my previous paper (Majewski 1973 p. 118, 120) need to be changed in agreement with the Catalogue of Polish Fauna (Catalogus faunae Poloniae 23, 2, 1973). "Pogonus persicus Chaud." is a synonym of Pogonus peisonis Ganglb., and "Trechus cardioderus Putz." a synonym of Trechus pilisensis Csiki.

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Rzadkie i nowe Laboulbeniales z Polski. V

Streszczenie

W pracy opisano nowe dla nauki gatunki, pasożytujące na Coleoptera: Cucujomyces rotundatus sp. n. na Silvanus unidentatus, Hydrophilomyces gracilis sp. n. i H. hamatus sp. n. na Cercyon spp. oraz pasożytujące na Dermaptera Hesperomyces forficulae sp. n. i na Acarina Rickia polonica sp. n. Podano również stanowiska czterech gatunków nowych dla Polski.