

Notes on the Korean Ascomycetes (III)

Duck-Hyun Cho

Department of Biology, Natural Science College, Woosuk University, Chonju 565-701, Republic of Korea

ABSTRACT

Many higher fungi of ascomycetes were collected at Mt. Jiri National Park from May to October 1996. They were identified and according to the results, *Orbilina*, *Pezicula*, *Creopus*, and *Lasiospheria* were new genera to Korea. *Dasyscyphus bicolor*, *Orbilina coccinella*, *Pezicula acericicola*, *Mollisia revincta*, *Hypocera citrina*, *Creopus gelatinosus*, *Lasiospheria ovina*, and *Rosellinia thelena* were newly to Korea.

Key words : *Dasyscyphus bicolor*, *Orbilina coccinella*, *Pezicula acericicola*, *Mollisia revincta*, *Hypocera citrina*, *Creopus gelatinosus*, *Lasiospheria ovina*, *Rosellinia thelena*.

Mt. Jiri national park is located boundary Chonlabuk-Do, Chonlanam-Do and Kyungsangnam-Do. Particularly it has virgine forests and many valleys which has good much of conditions for mycological habitations. Untill now, basidiomycetes of Mt.Jiri were studied by Park, Cho and Lee (1986), Park and Cho(1988, 1989) and Park, Cho and Ryoo(1990), Cho(1992) and Min(1988). A part of study on ascomycetes were reported by Cho(1996). This time many higher fungi of ascomycetes were collected at the Natural School of Kuyngsangnam-Do, Chonun-Sa temple, Pia-Kol and Bamsa-Kol of Mt.Jiri National Park. They were small and rotten wood fungi which are distinctly visible under lupe. These species will be added list of Korean fungi.

Dasychyphus bicolor(Bull. : Merat) Fuckel 쌍색털컵버섯(신칭) (Pl.1, Fig.1,A-D)

Fuckel. Jahrb. Nass. Vereins f. Naturkunde 23-24:305, 1870.

Breitenbach & Kranzlin, Fung. Switzer. vol.1, 186, f.214, 1984.

Fruiting body 1-2mm across, cup-shaped to saucer-shaped, plate-shaped in age, sessile, stalkless, yellowish to orange, hymenium smooth, outer surface and margin with long white hairs, margin inrolled when dry.

Spores 7-10x1.5-2 μ m, fusiform, sausage-form, smooth, hayline. Asci 57.5-62.5x5 m, eight-spored, clavate, spores biseriate, irregularly uniseriate. Paraphyses 55-80x2.5-5 μ m, lanceolate, longer than the asci.

Habitat : Clustered on fallen twigs of *Quercus*. Spring to summer.

Distribution : Korea (Mt. Jiri) and Europe.

Specimen studied : CHO-4520 (1996. 7.16) was collected at Chonun-sa temple of Mt. Jiri National Park.

Remarks : The genus *Dasychyphus* characterized by the paraphyses of lancelolate -shaped.

Orbilina Fr. 바퀴버섯속(신칭)

Fruiting body small, margin quite even, mostly on wood or bark, light-colored, waxy consisting, asci small, forked base, truncate tip, not blued by iodine, ascospores small, not septate. Paraphyses swollen at the tip.

Orbilina coccinella (Somm.) Karst. ss. Mos. 원추바퀴버섯(신칭)(Pl.2, Fig.2,A-C)

Peziza coccinella Sommerf. Wahlenb. Fl. Lapp, 296, 1826.

Seaver, North Amer. Cup-Fungi(Inoperculate), 157, 1951.

Fries, Summa Veg., Scand. Sect. Post.:357, 1849.

Breitenbach & Kranzlin, Fung. Switzer. vol.1, 210, f.250,

1984.

Fruiting body 0.2-0.4 mm, urceolate when young, then turbinate, amber-colored to orange when moist, pink to scarlet when dry, outer surface slightly furfuraceous, resting stalkless.

Spores $5-6 \times 1.5-2.0 \mu\text{m}$, elliptical, smooth, seldom with two three oil drops. Asci $26.3-30 \times 2.5-3.8 \mu\text{m}$, eight-spored, irregularly uniseriate, clavate, paraphyses $22.5-35 \times 1.3-2.5 \mu\text{m}$, filiform, forked toward tips.

Habitat : Solitary to clustered on bark of living trees. Summer. Widespread.

Distribution : Korea (Mt. Jiri) and Europe.

Specimens studied : CHO-4599 (1996.7.31) was collected at Bamsa-kol of Mt. Jiri National Park.

Pezicula Tulasne 접시주발버섯속(신칭)

Fruiting bodies erumpent, clustered from common stroma, cup-shaped with convex, usually pruinose disc, without a raised margin, brightly colored, asci 4- or 8-spored, large thick-walled, broad pore stained deep blue by iodine, ascospores elliptical or slightly kidney-shaped, large hyaline or yellowish, often with 3- or more septate, paraphyses usually swollen at the tip.

Pezicula acericola (Peck.) Sacc. 노란접시주발버섯(신칭) (Pl.3, Fig.3,A-C)

Nodularia acericola Peck, Ann. Rep. N.Y. Mus. 25:98, 1873.

Saccardo, Atti Ist. Veneto Ser. 6, 3:725, 1885.

Seaver, North Amer. Cup-Fungi (Inoperculate), 343, 1951.

Breitenbach & Kranzlin, Fung. Switzer. vol.1, 214, f.257, 1984.

Fruiting body 0.5-2mm across, turbinate when young, then with flat to cushionlike disk, emerging from the bark in small clusters in rows, hymenium yellowish orange, lightly farinose, outer surface and margin the same in color.

Spores $26-38 \times 8.5-10 \mu\text{m}$, elliptical, hyaline, slightly curved, with three-septa, wall thick, asci $112.5-162.5 \times 16.3-23.8 \mu\text{m}$,

eight-spored, operculate, irregularly biseriata. Paraphyses $100-137.5 \mu\text{m}$, filiform, with septate, forked toward tips.

Habitat : Clustered or often colonies on fallen dead branch and trunks of Acer (maple).

Spring to fall. Rare.

Distribution : Korea (Mt. Jiri) and Europe.

Specimen studied : CHO-4525 (1996. 7.17) was collected at Pia-kol of Mt. Jiri National Park.

Remarks : This species are easily recognizable by fruit bodies emerged in clusters or cespitose from the bark, their yellow to orange-yellow and farinose surface.

Mollisia revincta (Karst.) Rehm 말림연한살갓버섯(신칭) (Pl.4, Fig.4,A-C)

Breitenbach & Kranzlin, Fung. Switz. vol.1. Ascomycet. 228, f. 279. 1984.

Fruiting body 0.3-0.8mm, cup-shaped, irregularly saucer-shaped to disk-shaped, stalkless, hymenium blue-gray with ochre marginal zone, outer surface brownish.

Spores $0.5-8 \times 1.5-2 \mu\text{m}$, elliptical-shaped, Asci $52.5-65 \times 5 \mu\text{m}$, clavate spores irregular biserial. Paraphyses $50-62.5 \times 1.3-2.5 \mu\text{m}$, filiform.

Habitat : Clustered on rotting stems of Filipendula ulmaria (meadowsweet). Summer. Widespread.

Distribution : Korea (Mt. Jiri) and Europe.

Specimens studied : CHO-4521 (1996.7.17) was collected at Pia-Kol of Mt. Jiri National Park.

Hypocrea citrina (Pers. : Fr.) Fr. 노란점버섯(신칭) (Pl.5, Fig.5,A-B)

Breitenbach & Kranzlin, Fung. Switz. vol.1. Ascomycet. 254, f.317. 1984.

Fruiting body 0.5-1.0cm across, a few cm in extent, crustlike, covering on the surface of the substrate, margin irregular, tuberculate, marginal zone whitish, cream-colored to lemon-yellow toward the center when mature, with even fine dark punctation, the perithecia embedded.

Spores $3-4 \mu\text{m}$, globose, with fine punctation, seldom smooth, Asci $70.5-77.5 \times 4-4.5 \mu\text{m}$, 16-spored, spores uniseriate.

Paraphyses not observed.

Habitat : Clustered on crust of rotten stumps, covering the surrounding of branches, leaves. Summer to fall. Widespread.

Distribution: Korea (Mt. Jiri) and Europe

Specimen studied: CHO-4580 (1996.7.27) was collected at Whaom-sa temple of Mt. Jiri National Park.

Creopus Link 점액버섯속(신칭) (Pl.6, Fig.6,A-B)

Stroma sessile, flat, cushion-shaped, dotted with the ostiles of the completely perithecia, asci ultimately 16-spored, part-spores subglobose, ascospores greenish.

Creopus gelatinosus (Tode : Fr.) Link 끈적점액버섯(신칭)

Link, op. cit. : 1833.

Breitenbach & Kranzlin, Fung. Switzer. vol.1, 256, f.320, 1984.

Fruiting body 1-3mm across, spherical to cushionlike, light yellow when young, green-yellow when mature. Context gelatinous, translucent when moist. Perithecia green-warted, base slightly felty.

Spores 3-4 μ m, globose or 5.5-6.5x4-5 μ m, elliptical, with fine warts, dark green. Asci 165-175x7.5-8.8 μ m, sixteen-spored, uniseriate, cylindrical. Paraphyses not observed.

Habitat : Density cespitose on damp rotten wood. Summer to fall. Rare.

Distribution : Korea (Mt. Jiri and Mt. Hanla) and Europe.

Specimen studied : CHO-4488 (1996.7.9) was collected at the Natural School of Kuynsangnam-do of Mt. Jiri National Park and at Suak-Kol of Mt. Hanla National Park.

Remark : Dennis the upper globose 4 m diameter, the lower broadly elliptical 5-6x3-4 m.

Lasiosphaeria Ces. & de Not. 구멍곰버섯속(신칭)

Fruiting bodies superficial, gregarious, on wood or bark, more or less globose with papillate ostiole, black, smooth or hairy, asci 8-spored, ascospores cylindrical, often sharply bent or undulating, hyaline or ultimately light brown, septate or not.

Lasiosphaeria ovina (Fr.) Ces. & de Not. 털구멍버섯(신칭) (Pl.7, Fig.7,A-C)

Cesati & de Notaris, op. cit. : 229, 1863.

Breitenbach & Kranzlin, Fung. Switzer. vol.1, 266, f.335, 1984.

Fruiting body 0.4-0.6mm across, spherical to oval, surface with short pure white hairs, seldom with brownish white hyphal feltwork, resting directly or embedded. Perithecia black, with darkish papilla.

Spores 35-40x3-5 m, cylindrical, bent, yellowish, often with one septum, with pointed, hyaline appendages. Asci 180-210x16-22 m, eight-spored, irregularly biseriolate, with distinct refractile appendage at the apex. Paraphyses 52.5-82.5x1.3-2.5 m, filiform.

Habitat : Clustered on rotten wood. All year. Not common.

Distribution : Korea (Mt. Jiri) and Europe.

Specimen studied : CHO-4487 (1996.7.9) was collected at the Natural School of

Kuynsangnam-do of Mt. Jiri National Park.

Remark : This species has short pure white hairs.

Rosellinia Ces. & de Not. 장미버섯속(신칭)

(Pl.8, Fig.8,A-B)

Fruiting bodies superficial, usually on bark, not embedded in a common stroma, perithecia subglobose, smooth, black, ostiole papillate, asci with apical ring, ascospores black, non-septate, often with minute colorless appendage.

Rosellinia thelena (Fr.) Rab. 꽃꼭지장미버섯(신칭)

Breitenbach & Kranzlin, Fung. Switzer. vol.1. Ascomycet. 278, f. 352. 1984.

Fruiting body 0.7 - 1 mm, spherical, smooth, brownish-black nipple-like papilla, brittle, hard, solitary to a few fused together and resting on a brownish crusty to felty subiculum, slightly embedded.

Spores 21.5-26.5 x 6.5-7.0 m, navicular, smooth, darkish brown, with thornlike, hyaline appendage on either end, with germination tube, with one oil drop. Asci 110-150

x 6.5-8.5 μ m, long clavate, eight-spored, spores uniseriate, with distinct apical ring, blue when Melzer fluid.

Paraphyses not observed.

Habitat : Clustered branches of *Abies alba* (silver fir) still with bark.

Spring to summer. Rare.

Distribution: Korea (Mt. Jiri) and Europe

Specimen studied : CHO-4369(1996.5.10) was collected at Whaom-sa temple of Mt. Jiri National Park.

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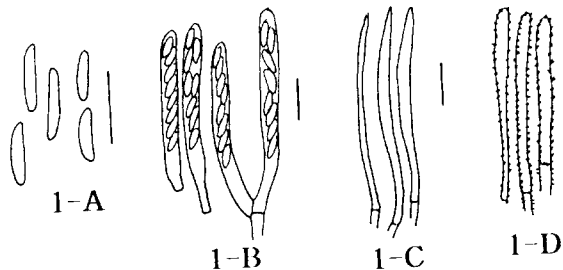
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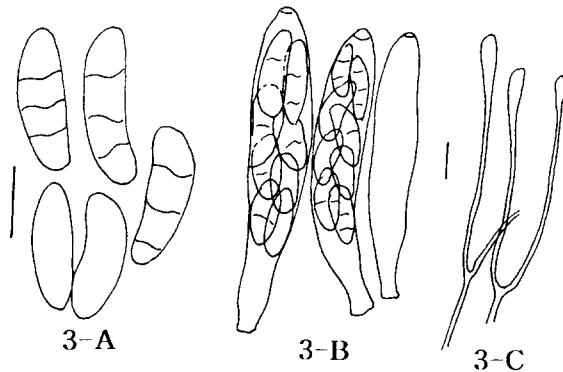
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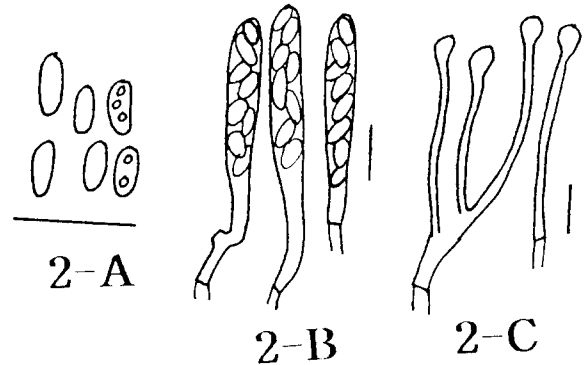
1. *Dasyscyphus bicolor*

1-A, Spores. 1-B, Asci. 1-C, Paraphyses. 1-D, Hair. (bars:10 μ m)



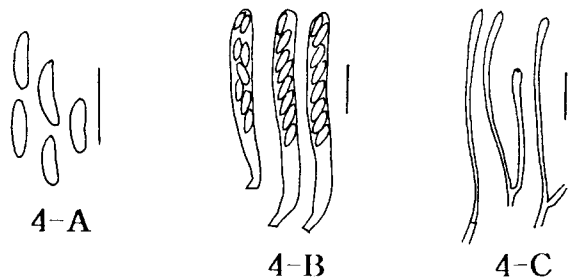
3. *Pezicula acericicola*

3-A, Spores. 3-B, Asci. 3-C, Paraphyses. (bars:10 μ m)



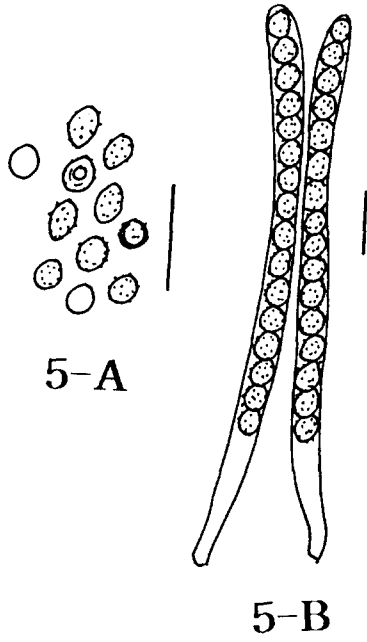
2. *Orbilia coccinella*

2-A, Spores. 2-B, Asci. 2-C, Paraphyses (bars:10 μ m)

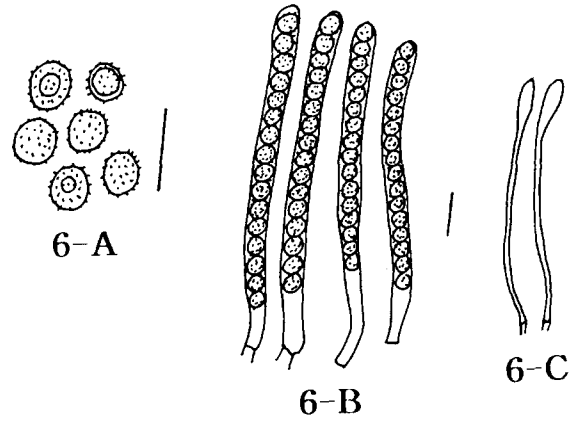


4. *Mollisia revincta*

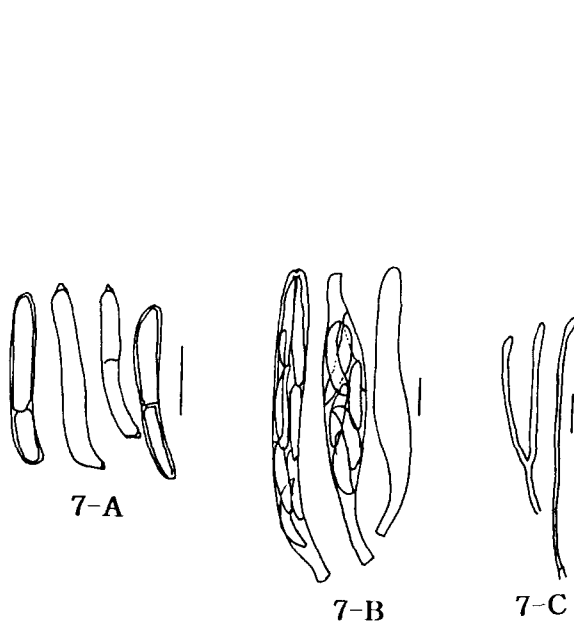
4-A, Spores. 4-B, Asci. 4-C, Paraphyses. (bars:10 μ m)



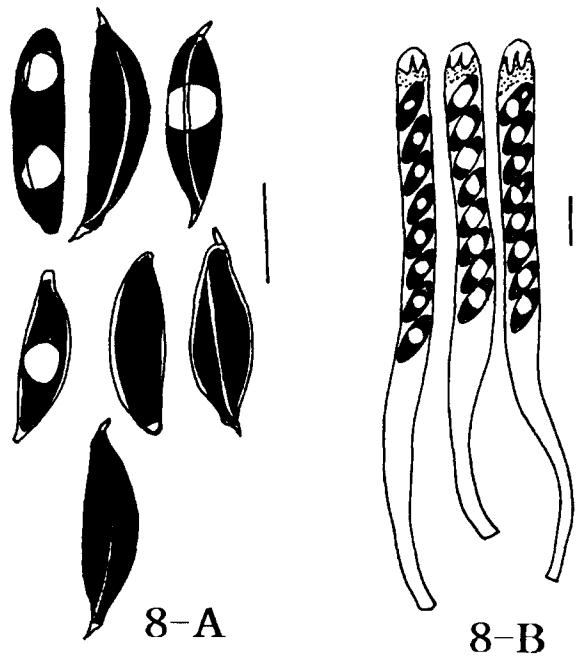
5. *Hypocera citrina*
6-A, Spores. 6-B, Asci. (bars:10 μ m)



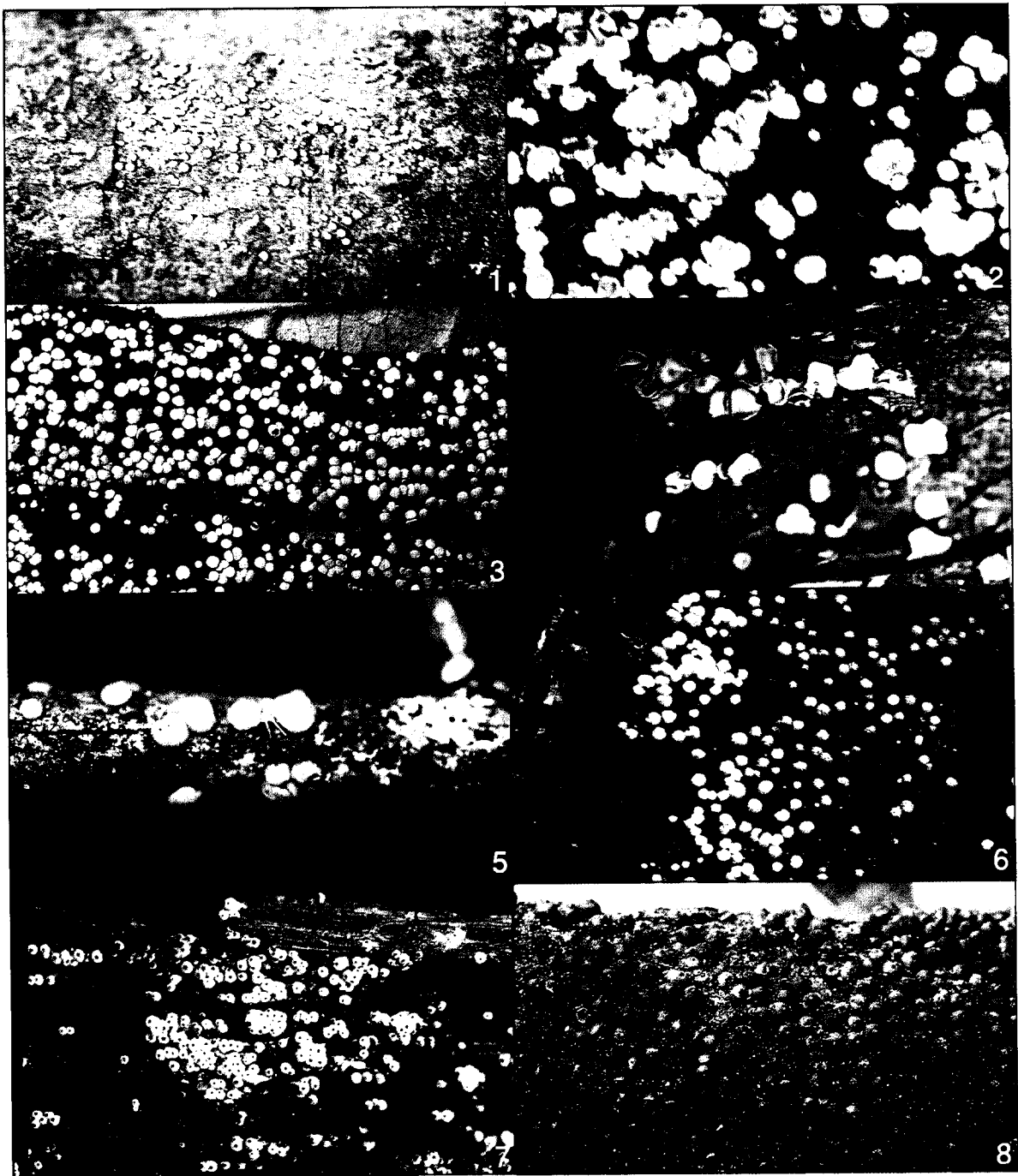
6. *Creopus gelatinosus*
5-A, Spores. 5-B, Asci. 5-C, Paraphyses. (bars:10 μ m)



7. *Laiospheria ovina*
7-A, Spores. 7-B, Asci. 7-C, Paraphyses. (bars:10 μ m)



8. *Rosellinia thelena*
8-A, Spores. 8-B, Asci. (bars:10 μ m)



The Explanation of Plate

1. *Dasyscyphus bicolor*
3. *Pezicula acercicola*
5. *Hypocera citrina*
7. *Lasio-spheria ovina*

2. *Orbilina coccinella*
4. *Mollisia revincta*,
6. *Creopus gelatinosus*
8. *Rosellinia thelena*.