

Wood-Rotting Fungi Collected in Suweon Campus of Seoul National University (I)

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서울대학교 水原캠퍼스에서 採集한 木材腐朽菌(I)

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Abstract: Wood-rotting fungi were collected in Suweon campus of Seoul National University from September 1981 to October 1982. These fungi were classified into 2 orders, 8 families, 22 genera and 34 species. Of these, *Gloeoporus adustus* (Willd. ex Fr.) Pilát and *G. dichrous* (Fr.) Bres. were found to be new species that belong to unrecorded genus in Korea. Korean common names of these two new species were designated by the authors. List of the wood-rotting fungi was given with the generic name of host trees on which the fungus was collected.

Description of the New Species in Korea

Polyporaceae

Gloeoporus 무른구멍장이버섯屬(新稱) Montagne, *Ann. Sci. Nat. Bot.* II. 17:126. 1842.

Gloeoporus adustus (Willd. ex Fr.) Pilát 그을음 무른구멍장이버섯(新稱)

Boletus adustus Willd., *Florae Berol. Prod.*, p. 392. 1787.

Polyporus adustus Willd. ex Fr., *Syst. Myc.* 1: 363. 1821.

Bjerkandera adusta (Willd. ex Fr.) Karst., *Soc. Fauna Flora Fenn. Meddel.* 5: 38. 1879.

Polyoprus burtii Peck, *Torrey Bot. Club Bul.* 24: 146. 1897.

Polystictus hirsutus var. *calvens* Clements, *Crypt. Form. Colo.*, no. 168. 1905.

Coriolus alabamensis Murr., *North Amer. Flora* 9: 19. 1907.

Sporophore sessile or effused-reflexed, tough to corky, rigid when dry, reviving, usually imbricate; pileus 1~6×3~10×0.1~0.8cm, white or cinereous

to smoke-grey or pale tan, rarely with reddish blotches or zones, finely tomentose to short villose-tomentose or nearly glabrous, or at times short stri-gose behind and the margin fibrillose or fibrillose-striate, the margin thin, even, often black in dried specimens, sterile below; context white or in dried specimens ochraceous or pale brown, 1~6mm thick, in large specimens separated from the tube layer by a narrow dark line; pore surface at first gray or grayish black, darker where bruised, often changing to black or rarely sordid brown in age and in herbarium specimens, the tubes 2 mm long or less, the mouths very minute, subcircular then angular, averaging 5~7 per mm, scarcely visible to the unaided eye; tramal tissue decidedly brown under the microscope; spores oblong or oblong-ellipsoid, rarely slightly curved, smooth, hyaline, 3.5~5×2~3 μ ; basidia quite small, 8~10×4~5 μ ; cystidia and hyphal pegs none; hyphae hyaline, considerably branched, with cross walls and clamps, 3~6 μ in diameter.

Habitat: Usually on dead wood of deciduous trees, noted on *Paulownia* and *Quercus*.

Distribution: Suweon.

Gloeoporus dichrous (Fr.) Bres. 겹무른구멍장이버섯
(新稱)

Polyporus dichrous Fr., *Syst. Myc.* 1: 364. 1821.

Sporophore sessile or effused-reflexed, often imbricate, very coriaceous when fresh, rigid when dry, reviving; pileus 0.5~4×1~8×0.1~0.5cm, white or whitish, rarely ochraceous in herbarium specimens, villose-tomentose or compactly tomentose, then velvety to nearly glabrous, the margin often narrowly sterile below and white; context white, 1~4mm thick; pore surface waxy and separable from the context in a thin elastic layer when fresh or when soaked, pale buff to flesh color, reddish purple or puplish black, the tubes less than 1mm long, the mouths circular to angular, rather thin-walled, entire, averaging 5~8 per mm, in vertical microscopic sections showing a context of closely interwoven hyphae of the usual type, separated from the hymenium by a narrower darker zone, the entire hymenial region composed of strongly gelatinized nonstaining hyphae contrasting sharply with the context; spores allantoid, 3~4.5×0.5~1 μ ; basidia 2.5~3 μ in diameter; cystidia none; context hyphae somewhat branched, the walls partially thickened, with conspicuous clamps and cross walls, 3~6 μ in diameter.

Habitat: On dead wood, usually of deciduous trees, noted on *Salix*.

Distribution: Suweon.

List of Wood-Rotting Fungi with Their Host Trees

Basidiomycotina 擔子菌亞部

Hymenomycetes 帽菌綱

Holobasidiomycetidae 同擔子菌亞綱

Agaricales 주름버섯目

Pleurotaceae 느타리科

Panellus stipticus (Fr.) Karst. 부채버섯

on *Pinus*

Schizophyllum commune Fr. 치마버섯

on *Cercis*, *Pinus*, *Prunus*, *Prunus*, *Pyrus*, *Quercus*,

Salix, *Wistaria*

Pleurotus ostreatus (Jacq. ex Fr.) Quél. 느타리

on *Quercus*

P. cornucopiae (Pers.) Rolland 노랑느타리
on *Quercus*, *Wistaria*

Panus rudis Fr. 참버섯

on *Platanus*

Tricholomataceae 송이科

Armillariella mellea (Vahl. ex Fr.) Kummer 뽕나무
버섯

on *Quercus*

Flammulina velutipes (Curt. ex Fr.) Karst. 팽나무버섯

on *Platanus*, *Populus*, *Quercus*, *Wistaria*

Coprinaceae 먹물버섯科

Coprinus atramentarius (Bull. ex Fr.) Fr. 두엄먹물버
섯

on *Populus*

C. disseminatus (Pers. ex Fr.) S.F. Gray 고갈먹물버섯
on *Populus*, *Quercus*

C. micaceus (Bull. ex Fr.) Fr. 갈색먹물버섯

on *Populus*, *Quercus*

Strophariaceae 득청버섯科

Pholiota adiposa (Fr.) Quél. 검은비늘버섯

on *Quercus*

P. squarrosa (Müll. ex Fr.) Kummer 비늘버섯

on *Populus*

P. squarrosoides (Peck) Sacc. 칩비늘버섯

on *Populus*

Aphylliphorales 민주름버섯目

Corticiaceae 고약버섯科

Stereum ostrea (Bl. ex Nees) Fr. 갈색꽃구름버섯

on *Prunus*

Meruliaceae 아교버섯科

Phlebia strigoso-zonatus (Schw.) Lloyd. 털가는주름버
섯

on *Quercus*

Mucronoporaceae 진흙버섯科

Phaeolus schweinitzii (Fr.) Pat. 해면버섯

on *Platanus*, *Populus*

Polyporaceae 구멍장이버섯科

Trametes dickinsii Berk. 등갈색송편버섯

on *Salix*

T. gibbosa Fr. 대합송편버섯

on *Salix*

T. trogii Berk. 토끼털송편버섯

on *Salix*

Pycnoporus sanguineus (L. ex Fr.) Murr. 갈겨섯

- on *Quercus*
Gloeoporus adustus(Willd. ex Fr.) Pilát 그을음무른구
 명장이버섯
 on *Paulownia, Quercus*
G. dichrous (Fr.) Bres. 겹무른구명장이버섯
 on *Salix*
Gloeophyllum abietinum (Fr.) Karst. 전나무조개버섯
 on *Pinus*
Lenzites betulina Fr. 조개껍질버섯
 on *Paulownia, Platanus, Quercus, Salix*
Daedaleopsis tricolor (Fr.) Schroet. 삼색도장버섯
 on *Alnus, Salix*
Hirschioporus abietinus (Dicks. ex Fr.) Donk 옷솔버
 섯
 on *Pinus*
Coriolus consors (Berk.) Imaz. 송곳니구름버섯
 on *Robinia, Quercus*
C. hirsutus (Wulf. ex Fr.) Quél. 흰구름버섯
 on *Prunus, Salix*
C. pubescens (Schum. ex Fr.) Quél. 흰용털구름버섯
 on *Quercus*
C. versicolor(L. ex Fr.) Quél. 구름버섯
 on *Alnus, Castanea, Paulownia, Pinus, Populus,*
Prunus, Pyrus, Quercus, Robinia, Salix
Fomitopsis officinalis (Vill. ex Fr.) Bond. et Sing. 말
 굽잔나비버섯
 on *Pinus*
F. cytisina(Berk.) Bond. et Sing. 흑잔나비버섯
 on *Alnus*
Grifola gigantea (Fr.) Pilát 왕잎새버섯

- on *Quercus*
Elfvíngia applanata(Pers. ex Wallr.) Karst. 잔나비
 걸상
 on *Quercus*

摘 要

1981年 9월부터 1982年 10월까지 서울大學校 木原캠 퍼스內에서 木材腐朽菌을 採集하였다. 이들은 2目, 8科, 22屬, 34種으로 分類되었으며, 그 中 韓國產 未記錄屬 *Gloeoporus*와 未記錄種 *G. adustus*(Willd. ex Fr.) Pilát 및 *G. dichrous*(Fr.) Bres.가 發見되었다. 이들 新種에 대해 우리말 버섯이름이 주어졌으며, 子實體에 대한 記述을 덧붙였다. 採集된 34種에 대해 各各 棲息하는 나무의 屬名을 記載하였다. 各 標本은 서울大學校 農科大學 農生物學科에 保存되어 있다.

韓國產 未記錄種의 同定에 協助하여 주신 美國 Virginia州立大學校 Orson K. Miller, Jr. 教授에게 感謝를 드린다.

References

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 Overholts, L.O. (1953): *The Polyporaceae of the United States, Alaska and Canada.* 466pp. Ann Arbor. University of Michigan Press. Baltimore
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Explanation of the Plates

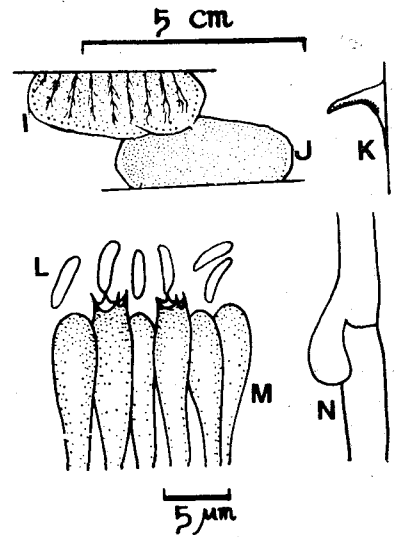
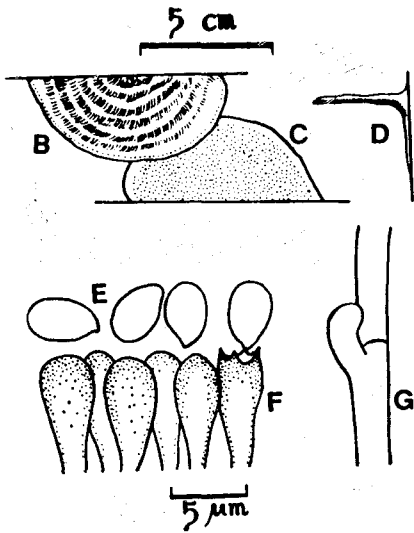
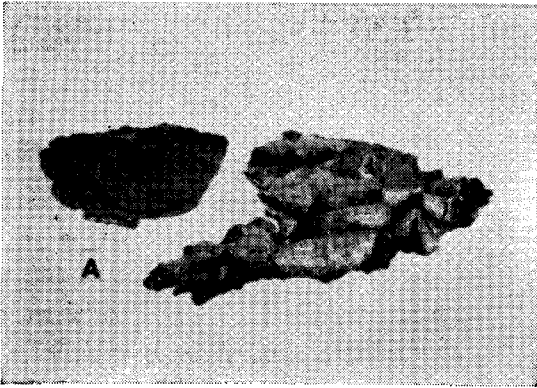


Fig. A~G. *Gleoporus adustus* (Willd. ex Fr.) (0.5×) Pilát A: sporophores, lower-surface view (left) and upper-surface view (right), B: upper-surface view, C: lower-surface view, D: side cut-down view, E: spores, F: basidia, G: hypha with clamp connection

Fig. H~N. *Gleoporus dichrous* (Fr.) Bres. (1.5×) H: sporophores, I: upper-surface view, J: lower-surface view, K: side cut-down view, L: spores, M: basidia, N: hypha with clamp connection