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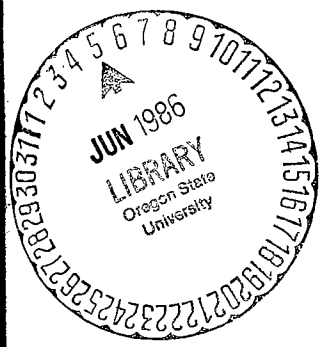
# TRANSACTIONS OF THE MYCOLOGICAL SOCIETY OF JAPAN

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## Some pyrenomycetous fungi found in the Amazon District

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Key word index—Pyrenomycetes; *Xylaria*; *Thamnomycetes*; *Stereocrea*; *Oomyces*; *Torrubiella*; *Flabellomyces*; Amazon.

### Summary

Eight taxa, including two new taxa, of pyrenomycetous fungi collected from the Amazon are described. They are *Xylaria axillaris* W. et Curr., *Thamnomycetes chamissonis* Ehrenb., *Stereocrea* sp., *Oomyces* spp., *Torrubiella fusiformis* Y. Kobayasi et D. Shimizu, *T. colombiana* Y. Kobayasi sp. nov., and *Flabellomyces amazonicus* Y. Kobayasi gen. nov. et sp. nov.

The present paper describes eight species of the Xylariaceae, Hypocreaceae, and others, which were collected from Amazon in South America by Dr. Y. Doi of the National Science Museum, Tokyo, and the author. Of these eight, six taxa have been previously described, and the other two are new. Of the latter, *Torrubiella colombiana* is a new species occurring on some insects, but the spider, and *Flabellomyces* is a new genus proposed here for *F. amazonicus*, a new species occurring on dead tree trunks in the jungle at Iquitos, Peru.

1. *Xylaria axillaris* W. et Curr. (Xylariaceae)

Fungi Angola p. 279, pl. 17, f. 24-25 (1867); Sacc., Syll. Fung. 1: 311 (1882).

Figs. 1 A, B, 3 A.

Stroma gregarious or fasciculated, very tiny, filiform, 10-15 mm long, 0.3 mm thick, grayish black. One to several perithecia on the upper portion of the stalk, superficial, depressed globose, with small pointed ostiola, black, smooth, 1-1.5 mm in diam. Asci 180-190 × 7-8 μm, containing 8 spores. Ascospores ellipsoid, 25-30 × 5-7 μm.

Habitat: On dead tree branches, Iquitos, along the Amazon main River, Peru, Y. Kobayasi, April 27, 1978.

Distribution: Angola, Africa.

2. *Thamnomycetes chamissonis* Ehrenb. (Xylariaceae)

In Nees, Hor. Phys. Berol. 79, 27 fig. (1820); Sacc., Syll. Fung. 1: 344 (1882); Lloyd, Myc. Writ. 5. Syn. Large Pyrenomycetes p. 11, f. 850 (1971). Figs. 1 C, D, 3 B.

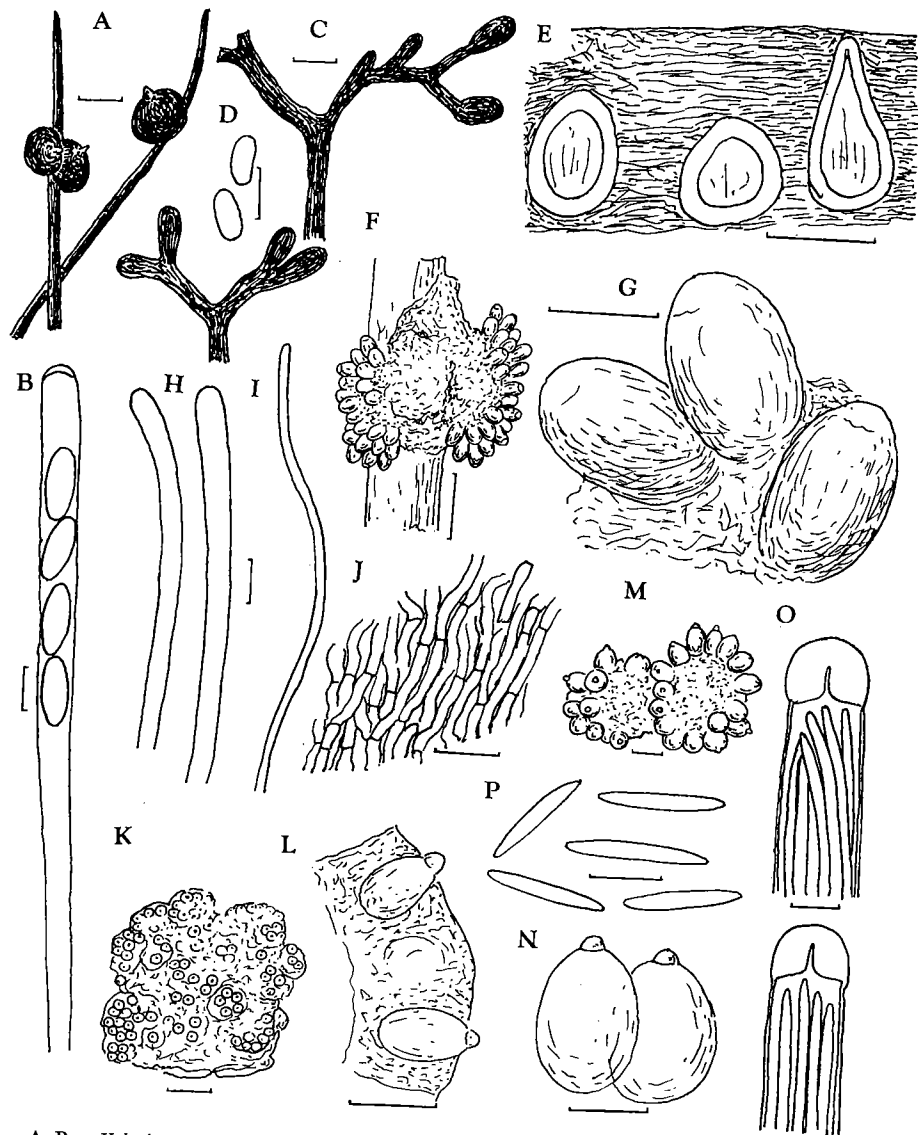


Fig. 1. A-B. *Xylaria axillaris*. A, Stromata. B, Ascus. C-D. *Thamnomycetes chamissonis*. C, Stromata. D, Ascospores. E. *Stereocrea* sp. Section through perithecia. F-J. *Oomyces* sp. 1. F, Stroma. G, Perithecia. H, Asci. I, Paraphysis. J, Stroma tissue. K-L. *Oomyces* sp. 2. K, Stroma. L, Section through perithecia. M-P. *Torrubiella fusiformis*. M, Stromata. N, Perithecia. O, Asci. P, Ascospores. (Scales: K=2 mm; A, C, F, M=1 mm; L, N=500  $\mu$ m; E, G=350  $\mu$ m; J=20  $\mu$ m; B, D=10  $\mu$ m; H, I, O, P=5  $\mu$ m.)

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Stromata 30–40 mm long, upper part dichotomously branched. Perithecia apically situated, ellipsoid, 1–1.2 mm long. Ascospores ellipsoid, asymmetric,  $10 \times 3.5\text{--}4 \mu\text{m}$ , pale brown.

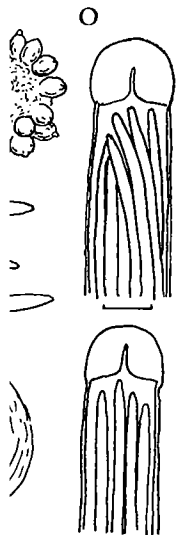
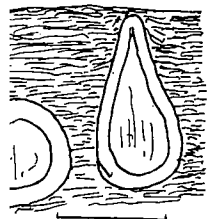
Habitat: On dead tree trunks, Iquitos, along the Amazon main River, Y. Kobayasi, April 26, 1978 (TNS).

Distribution: Brazil, Tropical Africa.

3. *Stereocrea* sp. (Hypocreaceae)

Figs. 1 E, 3 C.

Stroma laterally attached to twig, globose, black, coriaceous, very hard when dried inner tissue whitish, surface punctate. Perithecia wholly immersed, ampullaceous, immature.



*S. chamissonis*. C, Stromata.  
*S. yces* sp. 1. F, Stroma. G,  
*S. yces* sp. 2. K, Stroma. L,  
N, Perithecia. O, Asci.  
E, G=350  $\mu\text{m}$ ; J=20  $\mu\text{m}$ ;

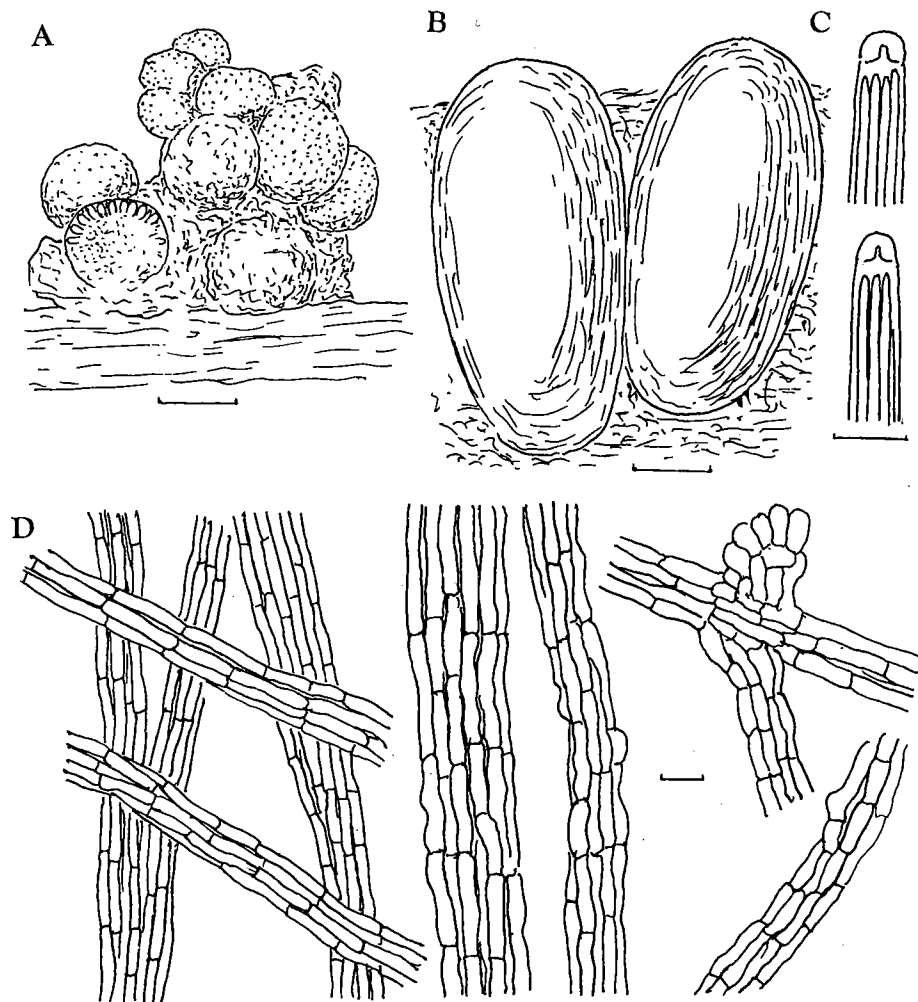


Fig. 2. A–C. *Torrubiella colombiana*. A, Stroma. B, Section through perithecia. C, Asci. D. *Flabellomyces amazonicus*. Mycelia. (Scales: A=2 mm; B=200  $\mu\text{m}$ ; C=5  $\mu\text{m}$ ; D=10  $\mu\text{m}$ .)

Habitat: On evergreen twigs and leaves, Perdomo, Putamago, Columbia, Y. Doi, March 8, 1962 (TNS-F-230929).

4. *Oomyces* sp. (1) (Hypocreaceae)

Figs. 1 E-J, 3 D.

Stroma globose or surrounding host branches, 2-3 mm in diam, densely covered with perithecia, brownish red hard coriaceous, not shrunken even in a dried state, internal tissue whitish. Perithecia superficial, ovoid, orange red, basal part imbedded in stromatal hyphal tissue,  $350-430 \times 200-230 \mu\text{m}$ . Asci  $2.5-3 \times 125-130 \mu\text{m}$ , without apical caps. Ascospores filiform, not septate. Paraphyses filiform, simple,  $1-1.5 \mu\text{m}$  thick. Hyphae of stroma peripheral tissue  $3.5-4 \mu\text{m}$  thick, septate, a pale reddish brown.

Habitat: On branches, Quebrada Huitoto, Rio Cagnan, Caqueta, Colombia, Y. Doi, July 30-Aug. 3, 1973 (TNS-F-225030).

5. *Oomyces* sp. (2) (Hypocreaceae)

Figs. 1 K, L, 4 A.

Stroma globose, verrucose, 3-5 mm in diam, an orange red the reverse dark red. Perithecia ovoid, immersed,  $600 \times 400 \mu\text{m}$ , with protruding ostiola. Asci immature.

Habitat: On tree branches, Quebrada, Huitoto, Rio Cagnan, Caqueta, Colombia, Y. Doi, July 30-Aug. 3, 1973 (TNS-F-225023).

6. *Torrubiella fusiformis* Y. Kobayasi et D. Shimizu (Clavicipitaceae)

Bull. Natn. Sci. Mus. Tokyo Ser. B. 7(4): 117, f. 3 (1981). Figs. 1 M-P, 5 B.

Subicula discoid, 2-2.5 mm in diam, cottony, pale yellow, with 10-20 perithecia, subicula hyphae 2-3 m in diam. Perithecia ovoid, superficial, 1 mm long, 0.7 mm in diam. Asci  $8-9 \mu\text{m}$  diam, cap  $7 \mu\text{m}$  in diam. Ascospores fusiform,  $9-10 \times 1.5 \mu\text{m}$ .

Habitat: On Rhyncotae (?), attached to leaves, Iquitos, along the Amazon main River, Peru, Y. Kobayasi, April 26, 1978.

7. *Torrubiella colombiana* Y. Kobayasi sp. nov. (Clavicipitaceae)

Figs. 2 A-C, C 4.

Stromata conglomerata, 5 mm in diam, globose, "Mars orange" vel "Salmon orange," mammillata. Perithecia immersa, ovoidea vel ellipsoides,  $1000 \times 400-450 \mu\text{m}$ ,

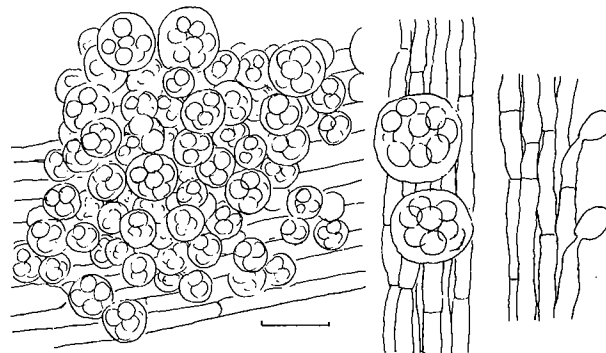


Fig. 3. *Flabellomyces amazonicus*. Conglomerated algal cells on mycelia and two conidia (right figure) produced on mycelia. (Scale =  $5 \mu\text{m}$ .)

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Figs. 1 E-J, 3 D.  
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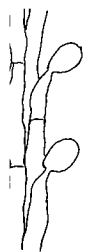
Figs. 1 K, L, 4 A.  
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(Clavicipitaceae)

Figs. 1 M-P, 5 B.  
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d two conidia (right figure)

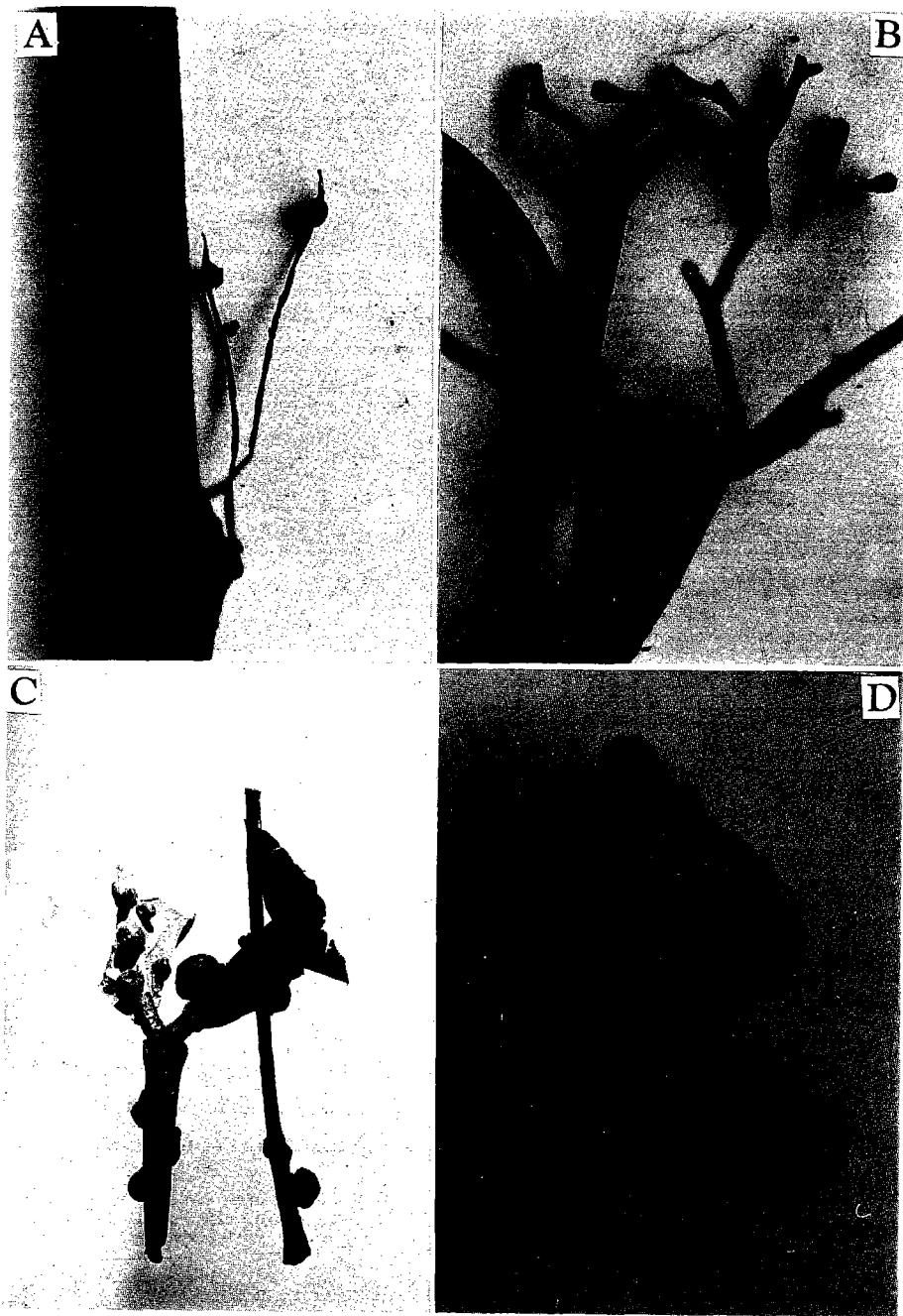


Fig. 4. A, *Xylaria axillaris*;  $\times 3$ . B, *Thamnomycetes chamissonis*;  $\times 2.8$ . C, *Stereocrea* sp.;  $\times 1.2$ . D, *Oomyces* sp.;  $\times 7.1$ .

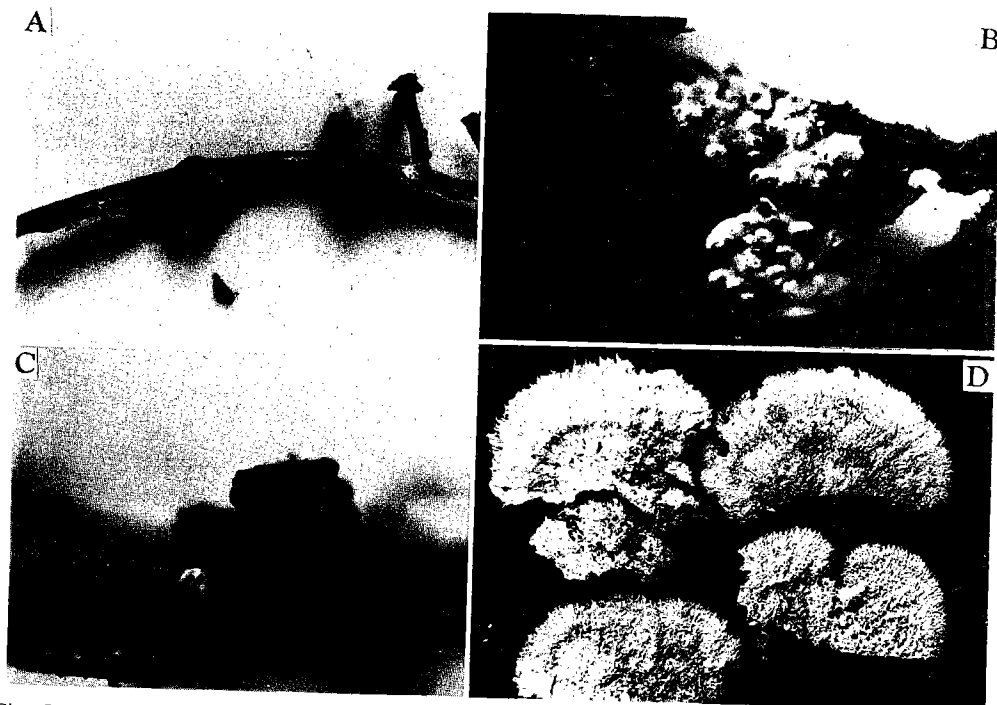


Fig. 5. A, *Oomyces* sp. 2;  $\times 3.5$ . B, *Torrubiella fusiformis*;  $\times 7$ . C, *Torrubiella colombiana*;  $\times 5.4$ . D, *Flabellomyces amazonicus*;  $\times 2.3$ .

tenuiparietalia. Asci 180–220  $\mu\text{m}$  longa, capitibus 3  $\mu\text{m}$  diam. Articuli ascosporarum 4–5  $\times$  1  $\mu\text{m}$ , utrinque truncati.

Habitat: On some insects (not spider) in plant roots, Quebrada, Huitoto, Rio Cagnan, Caqueta, Colombia, Y. Doi, July 30–Aug. 3, 1973 (TNS-F-225409, holotype; in TNS).

8. *Flabellomyces amazonicus* Y. Kobayasi gen. nov. et sp. nov. (New family of Lichen) Figs. 2 D, 3, 5 D.

Thallus flabelliforme tenue plumosum, 8–15 mm diam, margine minute fimbriatum, pallido cinereum, margine albescentia, superne obsculiter zonatum, inferne floccosum. Textura e myceliis radiatim ordinatis composita. Mycelia e hyphis 6–18  $\mu\text{m}$  crassis, irregulariter verrucosis composita. Hyphae multiseptatae 2.5–5  $\mu\text{m}$  crassae, tenuiparietaliae hyalinae. Conidia ovoidea 3  $\times$  2  $\mu\text{m}$ .

Habitat: On dead tree trunks in the jungle, Iquitos, along the Amazon main River, Peru, Y. Kobayasi, April 26, 1978. Type in TNS.

Many conglomerated algal cells were found on mycelia as shown in Fig. 3. At first, this fungus was believed to be a special case of the Basidiolichen, but physiological relationship seems not to exist between these two organisms and no basidial hymenium could not be found. This belongs to the new family of lichen, although the writer refrains from

the establishment of it because of the immature one.

摘 要

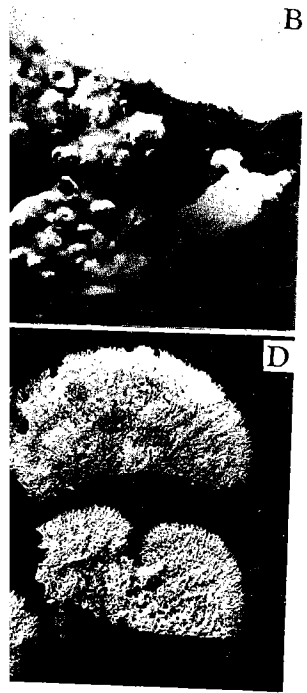
南米アマゾン地域産核菌類数種

小林 義雄

〒273 船橋市丸山町5-33-1.

南米アマゾン地域産核菌類の8種を記録した。8種のうち6種は既知種、1種は新属新種、残り1種は新種として記載した。

1. *Xylaria axillaris* W. et Curr.
2. *Thamnomycetes chamissonis* Ehrenb.
3. *Stereocrea* sp.
4. *Oomyces* sp. 1
5. *Oomyces* sp. 2
6. *Torrubiella fusiformis* Y. Kobayasi et D. Shimizu
7. *T. conglomerata* Y. Kobayasi sp. nov.
8. *Flabellomyces amazonicus* gen. nov. et sp. nov.



*rubiella colombiana*; ×5.4. D,

Articuli ascosporarum

Quebrada, Huitoto, Rio  
NS-F-225409, holotype;

sp. nov. (New family

Figs. 2 D, 3, 5 D.

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