Fungi Austro-Japoniae et Micronesiae.* III.

By

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With Plate II & 7 Text-figures.

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***Bulgaria frondosa* Y. KOBAYASI sp. nov. (Bulgariaceae).**

Apothecia erumpentia solitaria vel subcaespitosa sessilia foliacea irregulariter lobata 1–4 cm. lata gelatinoso-coriacea membranacea omnino atra, lobis repandis vel undulato-plicatis plus minusve nitidis extus glabra radiato-rugulosis in sicco fragilibus; textu 500–600 μ in diam. nigro-brunneo e hyphis 2.5–4.2 μ crassis septatis parce ramosis intus olivaceis granulatis pariete subincrassatis irregulariter composito; cortice 35–55 μ crasso e cellulis 3–4 stratis ordinatis vesiculaeformibus vel clavatis crasse gelatinoso-parietalibus 4–8 μ in diam. olivaceis composito.

Fig. 1. *Bulgaria frondosa* Y. KOBAYASI. $\times 1$.

Hymenium 50–69 μ crassum, epitheciis nullis. Asci cylindracei 35–40 $\times$ 3.5–4.2 μ octospori ochracei J.—. Paraphyses filiformes simplices 42–46 μ longae 0.7–1 μ in diam. sursum subincrassatae 2–3 septatae ochraceae apice saepe hamatae. Ascosporae oblique monostichae allantoideae leniter curvatae 4.2–5.6 $\times$ 1–1.4 μ continuatae pallide ochraceae.

Nom. Jap. Kurohanabiratake (nov.).

Hab. On dead trunks and branches of deciduous frondose trees.

Honsyû: Prov. Izu, Yugasima (Y. KOBAYASI, Jun. 20, 1937, Nov. 2, 1937—Type in KOBAYASI Herb.).

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When the writer met upon the present fungus for the first time, he took it for a *Tremella* from its foliaceous aspect and subgelatinous substance. In its microscopical features, however, the fungus is surely a member of *Bulgaria*, although such a foliaceous fungus is a unique one compared with many turbinate species of that genus. According to the description, *Bulgariella foliacea* STARB. from Brazil seems to be near the present fungus. Further investigations is necessary to clear the relation of these fungi, although the genus *Bulgariella* seems to be distinct from *Bulgaria* in having the excipulum composed of interwoven hyphae. This has also some affinity to the members of *Cenangium* of Dermateaceae, which are separated, however, by their pseudoparenchymatous inner tissue. *Ameghiniella*, a monotypic genus established by SPEGAZZINI seems to have same appearances with the present fungus, but this is now combined with *Cenangium*.

***Orbilina limpida* Y. KOBAYASI sp. nov. (Bulgariaceae).**

Apothecia perexigua superficialia sparsa depressosphaeroidea vel turbinata sessilia 1.5–4 mm. lata 1–2.5 mm. alta mollissime gelatinosa fere limpida subhyalina; textu e hyphis gracillimis $0.5\text{--}1\mu$ crassis dichotome ramosis composito; cortice distincto pseudoparenchymatico e cellulis vesiculaeformibus vel elongatis $17\text{--}50 \times 8\text{--}16\mu$ excavatis composito; hypothecio nullo.

Asci cylindrici apice angustiores hyalini $60\text{--}65 \times 5\text{--}6.3\mu$, inoperculati octospori J —. Paraphyses simplices filiformes apice $1.2\text{--}1.4\mu$ in diam. deorsum subattenuatae 2–3 septatae. Ascosporae oblique monostichae ellipsoideae hyalinae $6.3\text{--}7 \times 3.5\text{--}4\mu$, 2-guttulatae.

Nom. Jap. Tama-nikawatake (nov.).

Hab. On dead decorticated branches lying in damp place.

Honsyû: Prov. Musasi, Mt. Takao-san (Y. KOBAYASI, Oct. 24, 1937—Type in KOBAYASI Herb.).

In appearance and also in the spores, the present fungus is near *Neobulgaria margaritoidea* KIEL. (in Hedw. LXIX p. 92 (1930)), which, however, is distinguished from the former in having ochraceous hairs on margin of hymenium and the mycelial matt at the base.

Fig. 2.
Orbilina limpida
Y. KOBAYASI.
Paraphysis,
ascus, upper
part of ascus,
spore. $\times 1500$.

***Megalonectria Pseudotrichia* (SCHW.) SPEG. (Nectriaceae).**

in Anal. Soc. Cient. Argentina XII p. 82 pl. I fig. 42 (1881); Sacc. Syll.

Fig. 3. *Megalonectria Pseudotrichia* SPEG.

- A. Conidia
B. Ascospore
C. Ascus $\times 700$.

Fung. II p. 560 (1883) ; SEAVER in Mycologia I p. 180 pl. XIII fig. 1-2 (1909) ; P. et H. SYDOW in ENGL. Bot. Jahrb. LVI p. 432 (1921).

Syn. *Sphaeria pseudotrichia* SCHW. et BERK. et CURT. in Journ. Acad. Nat. Sci. Phil. II p. 289 (1853).

Nectria pseudotrichia BERK. et CURT. ibid. pl. XXV fig. 9.

Sphaerostilbe pseudotrichia BERK. et BR. in Journ. Linn. Soc. XIV p. 114 (1875).

Nom. Jap. Akatubutake.

Hab. Growing gregariously on dead branches.

Bonin: Isl. Hahajima; Mt. Tibusayama (Y. KOBAYASI, April 1936).

Distr. Canada, West Indies, S. America (Surinam—Type Locality), Ceylon, Java, Micronesia (Ponape).

***Mucronella pacifica* Y. KOBAYASI nom. nov. (Hydnaceae).**

Syn. ?*Pterula fascicularis* BRES. et PAT. in LLOYD, Myc. Writ. I, p. 50 (1901) ; LLOYD, Myc. Writ. V. p. 865 fig. 1470 (1919).

?*Mucronella fascicularis* FR. sensu LLOYD, Myc. Writ. IV p. 532 fig. 727 (1915) et V Let. 68 p. 7 (1918).

Fruetificatio exigua aculeis caespitoso-fasciculatis nonnullis vel numerosis pendulis composita 1-2.5 cm. longa 0.7-2.5 cm. lata, sine subiculo. Aculei arcuato-subulati simplices vel ad basin fureati solidi duriuscule carnosi glabri primo albidi maturitate subochracei in sicco brunnei 1-2 cm. longi, ad basin 0.3-1 mm. crassius intus e hyphis fibrillosis 3.5-4 μ crassis longitudinaliter ordinatis constructi.

Basidia clavata 40-45 $\times$ 9-10 μ 4 sterigmatica. Sporae ovoideae basi apiculatae 12-13.5 $\times$ 6.5-7 μ hyalinae. Pleurocystidia filiformia subhyalina 2 μ in diam.

Nom. Jap. Hanabitake (nov.).

Hab. Growing gregariously on dead trunks of *Callicarpa subpubescens*.

Bonin: Isl. Hahajima; Mt. Sekimon-yama (Y. KOBAYASI, April 1936).

Distr. Samoa.

The present fungus seems to be identical with

Fig. 4.

Mucronella pacifica
Y. KOBAYASI.

- A. Spores $\times 970$.
B. Part of
hymenium $\times 730$.

Pterula fascicularis which was reported from Samoa by BRESADOLA and PATOULLARD and, later, was referred to the European *Mucronella fascicularis* FR. by LLOYD, although the Samoan fungus is considered to have the globose spores. As the fungus in question is preferable to consider as belonging to *Mucronella* and moreover the name *M. fascicularis* must be discarded on account of the fact that the fungus called as *M. fascicularis* in Europe has been transferred to *Protohydnum* as *P. fascicularis* (FR.) BRES., the writer propose here a new name *M. pacificus* to the fungi of Bonin and Samoa.

Mycena cyanophos BERK. et CURT. form. **carolinensis** Y. KOBAYASI form. nov. (Agaricaceae).

Pileus campanulatus deinde convexo-planus in centrum leviter depressus 3–5–10 mm. latus radiato-striolatus margine serrulatus superficie ochraceus glabrus viscidulus. Stipes 3–5–10 mm. longus aequalis 0.5–0.7 mm. crassus glabrus vel subpruinosis, disco orbiculare 1–1.5 mm. in diam. Lamellae vix adnexae confertae pallidae margine integrae.

Basidia clavata $22-28 \times 6-7\mu$, 4 sterigmatica. Sporae ovoideae vel subglobosae 1-guttulatae $5.3-9 \times 4.5-6.3\mu$. Cheilocystidia compacta fusoido-ventricosa vel vesiculosa saepe apiculata $20-42 \times 10-16\mu$; pleurocystidiis minoribus sparsis. A typo fructificatione minore et pileo ochraceo differt.

Nom. Jap. Nan-yô Yakôtake
(nov.).

Fig. 5.
Aseroe arachnoidea
FISCHER.
Young fruit body.

Fig. 6. *Aseroe arachnoidea* FISCHER.
Adult fruit body.

Hab. Grown on trunks of *Ceiba pentandra*.
 Micronesia. Isl. Ponape (Y. KOBAYASI, Aug. 28, 1936—Typus in KOBAYASI Herb.).

Aseroe arachnoidea FISCHER. (Clathraceae).

in Denkschr. Schweiz. Naturf. Gesell. XXXII p. 76 (1890); Y. KOBAYASI in NAKAI et HONDA, Nova Fl. Jap. II p. 46 (1938).

Nom. Jap. Ikatake, Kumogata-suppontake (M. HIROE).

Hab. Growing gregariously on sandy and manured soil.

Honsyû: Prov. Owari, Aitigun, Tôgômura (M. HIROE, Nov. 3, 1938), Prov. Hôki, Mt. Daisen (Y. IKOMA, Aug. 12, 1934).

Distr. Java, Borneo, Sumatra, Cochin China, China.

Endocalyx melanoxanthus (BERK. et BR.) PETCH. (Melanconiaceae).

in Ann. Bot. XXII p. 399 pl. XXIV figs. 1-13 (1908); SACC. Syll. Fung. XXII p. 1454 (1913).

Syn. *Melanconium melanoxanthum* BERK. et BR. in Journ. Linn. Soc. XIV p. 89 (1875); SACC. Syll. Fung. III p. 758 (1884).

Fig. 7. *Endocalyx melanoxanthus*

PETCH.

Spores. $\times 1000$.

?*Phaeodiscula gonospora* PENZ. et SACC. in Malpighia (1901) p. 236 et Icon. Jav. p. 94 pl. LXIII fig. 3 (1904) (incl. subsp.).

Fructificatio 1-8 mm. alta 0.3-0.4 mm. crassa extus virescens (Yellowish Glaucoous—Water Green) maturitate raro apice longitudinaliter bi- vel trifida recurvata. Conidiophora gracillime filamentosa circa 1μ in diam. hyalina. Conidia depresso-globosa 9-16 μ in diam. 6.5-8.5 μ crassa primo obscure olivacea denique atra.

Nom. Jap. Nenkin-modoki (nov.).

Hab. Gregarious on midrib and sheath of decaying fronds of *Cocos nucifera*. Tokyo, in green house of Tokyo Univ. Lit. and Science, probably introduced from Bonin (Y. KOBAYASI, Oct. 1935).

Bonin: Isl. Titijima; Kiyose (Y. KOBAYASI, Nov. 1936).

Distr. Ceylon (Type Locality), Mauritius, Java.

Explanation of Plate II.

Upper. *Endocalyx melanoxanthus* PETCH. $\times 6$.

Down. *Mucronella pacifica* Y. KOBAYASI. $\times 1$.