

## New or Noteworthy Parasitic Fungi in Japan-II\*

By

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and

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### 1. *Cercospora astragali* WORONICHIN

Travaux du Musée Botanique de l'Acad. Sci., U.S.S.R. 21: 87-252, 1927.  
Hab. on *Astragalus sinicus* L. (Genge).

Pref. Kagoshima: Taniyamamura, May 20, 1951, H. YOSHII; May 27, July 27, 1951, H. TSUMAGARI.

### 2. *Cercospora chionanthi-retusi* TOGASHI et KATSUKI sp. nov.

(Fig. 1)

Maculis amphigenis, indefinitis, supra griseo-brunneis, infra nervuli limitatis, subangularibus, pallide brunneis, 1-6 mm. diametro, interdum, confluentibus;

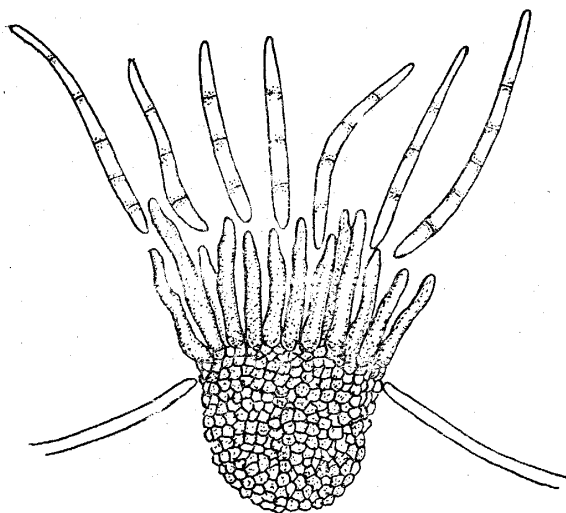


Fig. 1. *Cercospora chionanthi-retusi* TOGASHI et KATSUKI ( $\times 740$ ).

caespitulis amphigenis, praecipue epiphyllis, numerosissimis, griseo-lis; stromatis atro-fuscis vel atris, globosis vel subcircularibus,  $25-60\mu$  crassis; conidiophoris dense fasciculatis, non geniculatis, simplicibus, continuis, rectis vel leniter flexuosis, pallide fuligineis, brevis,  $18-27 \times 2.5-3.0\mu$ ; conidiis cylindraceis vel cylindraneo-obclavatis, rectis vel leniter curvatis, ad bases obconicis, ad apices acutiusculis, hyalinis, ad septa non constrictis, 2-6-septatis,  $30-50 \times 2.5-3.0\mu$ .

Hab. on *Chionanthus retusus* LINDL. et PAXT. (Hitotsuba-tago).

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Pref. Fukuoka: Fukuoka-city, Oct. 16, 1951, S. KATSUKI-Type.

The present species differs from *C. chionanthi* ELL. et EV. in having well developed stromata, denser fascicles, paler, shorter conidiophores, and more nearly cylindric, more narrow conidia.

### 3. *Cercospora chrysanthemi* HEALD et WOLF

Mycologia 3: 15, 1911; B. P. I. Bull. 226: 85, 1912; LIENEMAN, Ann. Mo. Bot. Gard. 16: 32, 1929; TAI, Bull. Chin. Bot. Soc. 2, 2: 49-50, 1936.

Syn. *Cercospora chrysanthemi* PUTTEMANS, Bull. Soc. Roy. Bot. Belgique, 8: 244-247, 1911.

*C. chrysanthemi-coronarii* SAWADA, Descrip. Catal. Formosan fungi II: 147-149, 1922.

Hab. on *Chrysanthemum coronarium* L. var. *spatiosum* BAILEY (Shungiku).

Pref. Kagoshima: Sakurajima, April 29, 1950, S. KATSUKI.

The *Cercospora* fungus occurring on *Chrysanthemum coronarium* var. *spatiosum* has hitherto been identified as *C. chrysanthemi-coronarii* in Japanese literature, but no significant difference between the fungus and *C. chrysanthemi* could be found as TAI (1936) already pointed out.

*C. chrysanthemi* is included in the long synonymous list of *C. apii* FRES. under the consideration of JOHNSON and VALLEAU (Phytopa. 39, 10: 763-770, 1949).

### 4. *Cercospora contraria* H. et P. SYDOW

Sacc. Syll. Fung. 22: 1430, 1913.

Hab. on *Dioscorea quinqueloba* THUNB. (Kaede-dokoro).

Pref. Fukuoka: Shikanoshima, Nov. 27, 1949, S. KATSUKI.

### 5. *Cercospora evodiae* SYDOW

Ann. Myc. 12: 112, 1914; SAWADA, Descrip. Catal. Form. Fungi I: 669, 1919; Sacc. Syll. Fung. 25: 889-890, 1931.

Hab. on *Evodia meliaefolia* BENTH. (Hama-sendan).

Pref. Kagoshima: Mt. Shiroyama, Kagoshima-city, Oct. 26, 1949, S. KATSUKI.

### 6. *Cercospora fukuokaensis* CHUPP sp. nov.

(Fig. 2)

Maculis amphigenis, primum minutis, sparsis, subangularibus, venulis limitatis, rubro-brunneis, 1-3 mm., dein sordide brunneis vel griseo-brunneis, saepe confluentibus, interdum ad margine folium irregularibus; caespitulis amphigenis, saepe hypophyllis, prexiguis; stromatis subglobosis, brunneis vel atro-brunneis, 17-35  $\mu$  crassis; conidiophoris dense fasciculatis, simplicibus, rectis

vel leniter flexuosis, olivaceo-brunneis, continuis, brevis,  $7-27 \times 2.5-3.7 \mu$ , plerumque  $20 \times 3 \mu$ ; conidiis conspicuiter obclavatis, rectis vel curvulis, ad bases truncatis vel subtruncatis, ad apices acutis, 1-7-septatis, hyalinis,  $32-70 \times 2.5-3.0 \mu$ .

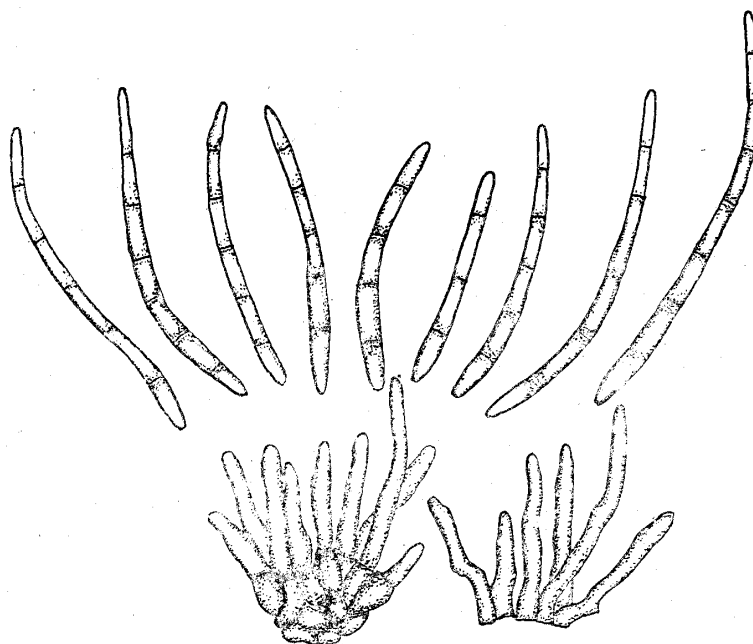


Fig. 2. *Cercospora fukuokaensis* CHUPP ( $\times 740$ )

Hab. on *Styrax japonica* SIEB. et ZUCC. (Egonoki).

Pref. Fukuoka: Futsukaichi-machi, July 5, 1950, Sept. 22, 1950; Sept. 5, 1951, S. KATSUKI-Type; Mino-mura, Oct. 11, 1951, S. KATSUKI. Pref. Tokyo: Nanao-mura, Oct. 7, 1951, E. KUROSAWA.

This fungus is not like *C. styracae* nor any of the species on other hosts of Styracaceae.

#### 7. *Cercospora hibisci* TRACY et EARLE

Bull. Torrey Bot. Club. 22: 179, 1895; Sacc. Syll. Fung. 14: 1099, 1899; LIENEMAN, Ann. Mo. Bot. Gard. 16: 38, 1929; SOLHEIM, Mycol. 23: 373-379, 1931.

Syn. *Cercospora hibisci-manihotis* P. HENN. Hedw. 43: 146, 1904.

*C. hibisci-cannabini* SAWADA, Descrip. Catal. Form. Fungi, II: 153, 1942.

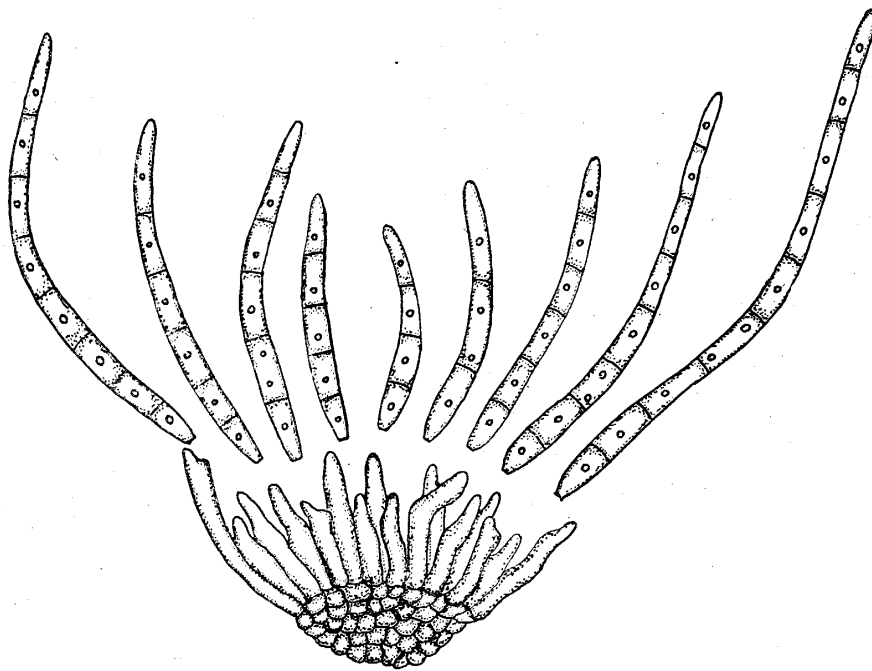
Hab. on *Hibiscus syriacus* L. (Mukuge).

Pref. Fukuoka: Hojo-mura, Oct. 16, 1947; Moji-city, Oct. 26, 1948; Kurume-city, Nov. 6, 1947, S. KATSUKI. Pref. Kagoshima, Yaku Island, Aug. 10, 1951, K. TOGASHI and S. KATSUKI.

8. *Cercospora horiana* TOGASHI et KATSUKI sp. nov.

(Fig. 3)

Maculis amphigenis, sparsis, primum minutis, nigro-brunneis, subcircularibus et irregularibus, dein effusis et magnis, supra atro-brunneis, nigro-marginatis, non rare zonatis, 5-10 mm. diametro, saepe confluentibus; caespitulis amphigenis, sed autem saepe hypophyllis, dispersis, paucis in quaque macula, minutissime punctiformibus; stromatis globosis, atro-brunneis, 18-37  $\mu$  crassis; conidiophoris dense fasciculatis, pallide fuligineis, brevis, plerumque 12-25  $\times$  3-4  $\mu$ , raro usque 37  $\times$  4  $\mu$ , simplicibus, rectis vel subflexuosis, non septatis; conidiis cylindraceis vel obclavatis, utrimque attenuatis, erectis vel curvatis, ad bases subtruncatis, ad apices subobtusis, guttulatis, 2-8-septatis, dilute fuligineis, 25-123  $\times$  3-5  $\mu$ .

Fig. 3. *Cercospora horiana* TOGASHI et KATSUKI ( $\times 740$ )

Hab. on *Parthenocissus tricuspidata* PLANCH. (Tsuta).

Pref. Chiba: Matsudo, Oct. 21, 1925, S. HORI. Pref. Tokyo: Nanao-mura, Minamitama-gun, Oct. 7, 1951, E. KUROSAWA-Type.

The only two species of *Cercospora* having stromata have been described on Vitaceae. The conidiophores of our species are somewhat like those of *C. riachueli* SPEG. and *C. brachypus* ELL. et EV., but the latter have quite distinct conidia and differ in other ways.

### 9. *Cercospora hydrocotyles* ELL. et EV.

Jour. Myc. 3: 16, 1887; Sacc. Syll. Fung. 10: 624, 1892.

Hab. on *Hydrocotyle sibthorpioides* LAMK. (Chidome-gusa).

Pref. Fukuoka: Fukuoka-city, Oct. 31, 1948; Katsura-mura, June 6, 1950, S. KATSUKI. Pref. Kagoshima: Yaku Island, Oct. 20, 1949, S. KATSUKI.

### 10. *Cercospora litseae-glutinosae* H. et P. SYDOW

Philipp. Jour. Sci. (Bot.), 8: 284, 508, 1913; Ann. Myc. 15: 264-265, 1917.

Hab. on *Litsea japonica* JUSS. (Hama-biwa).

Pref. Miyazaki: Aoshima Island, Apr. 26, 1951, S. KATSUKI. Pref. Kagoshima: Yaku Island, Aug. 5, 1951, K. TOGASHI and S. KATSUKI.

### 11. *Cercospora nojimai* TOGASHI et KATSUKI sp. nov.

(Fig. 4)

Maculis amphigenis, angularibus vel irregularibus, nervuli limitatis, supra atro-brunneis vel violaceo-brunneis, indefinite marginatis, subinde sordide-brunneis, infra griseo-brunneis vel brunneis, 3-8 mm. diametro, confluentibus, saepe totum folium occupantibus; caespitulis epiphyllis, griseoribus; stromata atro-brunneis, cellulis paucis compositis vel absentis; conidiophoris fasciculatis, simplicibus, continuis vel 1-septatis, atro-brunneis, brevis,  $25-40 \times 2.5-3.7 \mu$ ; conidiis elongato-obclavatis, curvatis, raro rectis, ad bases obconico-truncatis, ad apices subacutis, olivaceis,  $55-90 \times 2.5-3.7 \mu$ .

Hab. on *Impatiens textori* MIQ. (Tsurifune-so).

Pref. Kyoto: Mt. Hiei, Oct. 12, 1924, T. NOJIMA. Pref. Tokyo: Nanao-mura, Minamitama-gun, Oct. 7, 1951, E. KUROSAWA-Type. Pref. Kanagawa: Yumoto, Hakone, Oct. 15, 1950, K. TOGASHI

The present fungus has colored distinctly elongate-obclavate conidia and very short conidiophores, differing from *C. campisilii* (TOGASHI, Bull. Imp. Coll. Agric. & Forestry, Morioka, 17: 56-57, 1934) and *C. fukushiana* (MATSUURA) YAMAMOTO (Jour. Soc. Trop. Agric. 6: 601-602, 1934) with hyaline, acicular conidia. This

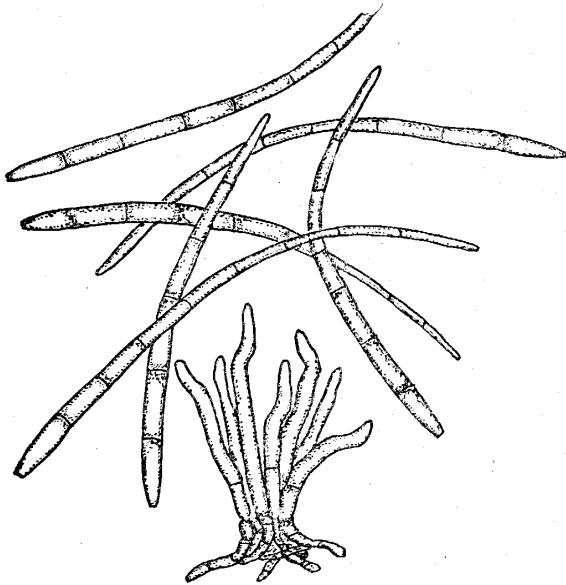


Fig. 4. *Cercospora nojimai* TOGASHI et KATSUKI ( $\times 740$ )

fungus is also clearly distinguishable from *C. balsaminae* Mendoza (MENDOZA and LEUS-PALI, Philipp. Jour. Sci. 75: 166-168, 1941).

The macroscopical distinction of our fungus from the fungi mentioned above is in having vein-limited, angular, blackish-brown spots.

#### 12. *Cercospora nymphaeacea* COOK et ELLIS

Grevillea 6: 89, 1878; Sacc. Syll. Fung. 4: 432, 1886; ELLIS and EVERHART, Jour. Myc. 1: 22, 1885; ATKINSON, Elisha Mitchel Sci. Soc. Jour. 8: 54, 1892; LIENEMAN, Ann. Mo. Bot. Gard. 16: 43, 1929; TIRUMALACHER and CHUPP, Mycol. 40: 358, 1948.

Syn. *Cercospora exotica* ELL. et EV. Proc. Acad. Nat. Sci. Phila. 45: 463, 1898.

*C. nelumbonis* THARP, Mycol. 9: 111, 1917.

Hab. on *Nuphar japonicum* DC. (Kawahone).

Pref. Fukuoka: Raizan-mura, Aug. 6, 1950, S. KATSUKI.

#### 13. *Cercospora omphakodes* ELLIS et HOLWAY

Jour. Myc. 1: 5, 23, 1885; Sacc. Syll. Fung. 4: 447, 1886; ATKINSON, Elisha Mitchel Sci. Soc. Jour. 8: 42, 1892; LIENEMAN, Ann. Mo. Bot. Gard. 16: 43, 1929; CHUPP and DOIDZE, Bothalia, 4, 4: 889, 1948.

Syn. *C. phloginia* PECK, New York Sta. Mus. Bull. 150: 23, 1911.

Hab. on *Phlox paniculata* L. (Kusa-kyochikuto).

Pref. Tokyo: Toyoda, Minamitama-gun, Oct. 3, 1950, E. KUROSAWA.

This species belongs to *C. apii* FRES. in the view of JOHNSON and VALLEAU (l. c.).

#### 14. *Cercospora pittospori* PLAKIDAS

Mycol. 32: 601, 1940.

Hab. on *Pittosporum tobira* AIT. (Tobera).

Pref. Fukuoka: Shikano-shima, Dec. 23, 1948, S. KATSUKI. Pref. Kagoshima: Yaku Island, Oct. 17, 1949, S. KATSUKI.

#### 15. *Cercospora ubi* RACIB.

Parasit. Algen u. Pilze Javas, 3: 39, 1900; Sacc. Syll. Fung. 16: 1073, 1902; BUTLER and BISBY, The Fungi of India: 144, 1931; YAMAMOTO, Jour. Soc. Trop. Agric. 6: 608, 1934; SAWADA, Agric. Exp. Sta. Formosa, Circ. 38: 702, 1942; Descrip. Catal. Form. Fungi VIII: 124, 1943.

Hab. on *Dioscorea bulbifera* L. f. *spontanea* MAKINO et NEMOTO (Marubadokoro).

Pref. Iwate: Morioka, Sept. 12, 1935, K. TOGASHI. Pref. Kagoshima: Yaku Island, Oct. 13, 18, 1949, S. KATSUKI. Pref. Fukuoka: Shikanoshima, Nov. 21, 1949, S. KATSUKI.

**16. *Mycosphaerella pueraricola* (YAMAMOTO) WEIMER et LUTTRELL**

Phytopa. **38**: 348-358, 1948.

Syn. *Cercospora pueraricola* YAMAMOTO, Trans. Sapporo Nat. Hist. Soc., 142-143, 1934.

Hab. on *Pueraria lobata* OHWI (Kudzu).

Pref. Fukuoka: Mt. Ehiko, Sept. 21, 1940, Y. MAKI; Osa-mura, Nov. 11, 1951, S. KATSUKI.

The present fungus was first described by YAMAMOTO in 1934 from Formosa naming of *C. pueraricola*. Recently WEIMER and LUTTRELL (1948) discovered the perfect stage of this species from Georgia, U. S. A. and they reported under the name of *Mycosphaerella pueraricola*.

**17. *Mycosphaerella rosicola* (PASSERINI) DAVIS**

Mycol. **30**: 282-298, 1938; Texas Agric. Exp. Sta. Circ. 87: 9, 1940.

Syn. *Cercospora rosicola* PASSERINI, Just's Bot. Jahresber. **3**: 276, 1877; Sacc. Syll. Fung. **4**: 460, 1886; WINTER and DEMETRIO, Hedw. **24**: 205, 1885; LINDAU in Rabenhorst. Krypt. Fl. **9**: 102, 1910; LIENEMAN, Ann. Mo. Bot. Gard. **16**: 46, 1929; SOLHEIM, Ill. Biol. Monog. **12**: 41, 1929; PETRAK and CIFERINI, Ann. Myc. **30**: 334, 1932; CHUPP, Monog. Univ. Puerto Rico Ser. B, **2**: 252, 1934; YAMAMOTO, Jour. Soc. Trop. Agric. **6**: 606, 1934.

*C. rosicola* var. *undosa* DAVIS, Trans. Wis. Acad. **20**: 399-411, 1922.

*C. rosae* VAN HOOK, Indiana Acad. Sci. Trans. **38**: 131-132, 1928.

*C. rosae-indianensis* VAN HOOK, Indiana Acad. Sci. Trans. **39**: 75-83, 1929.

*C. rosigena* THARP, Mycol. **9**: 114, 1917.

Hab. on *Rosa multiflora* THUNB. (No-ibara).

Pref. Yamanashi: Foot of Mt. Fuji, July 7, 1951; Vicinity of Motosu Lake, July 8, 1951, E. KUROSAWA.

JOHNSON and VALLEAU (l. c.) considered *C. rosigena* THARP being synonymous with *C. apii* FRES.

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