

琉球大学学術リポジトリ

琉球列島錆菌フローラ資料1

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Materials for a rust-flora of the Ryukyu Archipelago I¹⁾

By

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1. Species of Uredinales newly found in the Satsunan Islands

There are 126 species of Uredinales have been reported by the writers (6) and S. Katsuki (7) from the Satsunan Islands including Yakushima Isl. and Tanegashima Isl. In August of 1957, Shimabukuro, one of the writers made the mycological survey in the islands, with M. Tamori, his assistant, and they newly found 18 species of Uredinales from the islands. Among 18 species, the following four species are newly added to the rust-flora of the Ryukyu Islands; *Milesina vogesiacea* (Faull) Sydow, *Melampsora coleosporioides* Dietel, *Puccinia asparagi-lucidi* Dietel and *Uredo sawadae* S. Ito et Otani.

1. ***Milesina vogesiacea* (Faull) Sydow ex Hiratsuka, f., Monogr. Pucciniastr., p. 96, 1936. HAB. II. On *Dryopteris varia* O. Kuntze (*Itachishida*)?. *Tanegashima Isl.*: Nishinoomote-machi (Aug. 13, 1957, S. S. & M. T., Ta-54).**
2. ***Melampsora coleosporioides* Dietel in Bot. Jahrb. XXXII, p. 50, 1902. HAB. II. On *Salix babylonica* L. (*Shidare-yanagi*) (cult.). *Yakushima Isl.*: Nagata (Aug. 11, 1957, S. S. & M. T., Y-68).**
3. ***Phakopsora glochidii* (Syd.) Arthur in Bull. Torr. Bot. Club, XLIV, p. 506, 1917. HAB. II, III. On *Glochidion hongkongense* Müll.-Arg. (*Kakiba-kankonoki*). *Yakushima Isl.*: Haro (Aug. 6, 1957, S. S. & M. T., Y-52).**
4. ***Coleosporium asterum* (Diet.) Sydow in Ann. Myc. XXIII, p. 109, 1914. HAB. II. On *Kalimeris incisa* DC. var. *yomena* Kitamura (*Yomena*). *Yakushima Isl.*: Miyanoura (Aug. 9, 1957, S. S. & M. T., Y-60). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 13, 1957, S. S. & M. T., Ta-67).**

1) Contributions from the Laboratories of Phytopathology and Mycology, Faculty of Agriculture, Tokyo University of Education. no. 32, also Contributions from Laboratory of Phytopathology, Agriculture & Home Economics Division, University of the Ryukyus. no. 7.

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5. **Poliotelium hyalospora** (Sawada) Mains in Bull. Torr. Bot. Club, LXVI, p. 175, 1939. HAB. II, III. On *Acacia confusa* Merr. (*Shoshijyu*) (*cult.*). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 15, 1957, S. S. & M. T., *Ta-58*).
6. **Uromyces appendiculatus** Link in Ges. Nat. Freunde Berlin Mag. VII, p. 28, 1815. HAB. II, III. On *Phaseolus vulgaris* L. (*Ingenmame*) (*cult.*). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 13, 1957, S. S. & M. T., *Ta-59*).
7. **Uromyces proeminens** Léveillé in Ann. Sci. Nat. (III), VIII, p. 371 & 375, 1847. HAB. II, III. On *Euphorbia supina* Rafin. (*Konishikiso*). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 15, 1957, S. S. & M. T., *Ta-63*).
8. **Puccinia asparagi-lucidi** Dietel in Bot. Jahrb. XXXII, p. 625, 1903. HAB. II. On *Asparagus cochinchinensis* Merr. (*Kusasugikazura*). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 15, 1957, S. S. & M. T., *Ta-52*).
9. **Puccinia breviculmis** Dietel in Ann. Myc. V, p. 72, 1907. HAB. II. On *Carex breviculmis* R. Br. (*Ao-suge*). *Yakushima Isl.*: Kurio~Onoaida (Aug. 8, 1957, S. S. & M. T., *Y-55*).
10. **Puccinia crepidis-integrae** Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 61, 1952. HAB. II. On *Crepidastrum lanceolatum* Nakai (*Heranaren*). *Yakushima Isl.*: Yoshida~Nagata (Aug. 10, 1957, S. S. & M. T., *Y-58*).
11. **Puccinia cynodontis** Lacroix ex Desm., Pl. Crypt. II, no. 655, 1859. HAB. II. On *Cynodon dactylon* Pers. (*Gyogi-shiba*). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 15, 1957, S. S. & M. T., *Ta-64*). *Yakushima Isl.*: Yoshida~Nagata (Aug. 10, 1957, S. S. & M. T., *Y-56*).
12. **Puccinia juncelli** Dietel in Ann. Myc. VIII, p. 306, 1910. HAB. II. On *Juncellus serotinus* Clarke (*Mizu-gayatsuri*). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 15, 1957, S. S. & M. T., *Ta-69*).
13. **Puccinia phyllostachydis** Kusano in Bull. Coll. Agric. Tokyo Imp. Univ. VIII, p. 2 & pl. V, figs. 1, 2, 10 & 11, 1908. HAB. II. On *Sinoarundinaria reticulata* Ohwi (*Ma-dake*). *Yakushima Isl.*: Anbo (Aug. 1, 1957, S. S. & M. T., *Y-67*).
14. **Puccinia pogonatheri** Petch in Roy. Bot. Gard. Peradeniya, V, p. 235, 1912. HAB. II. On *Pogonatherum crinitum* Kunth. (*Itachi-gaya*). *Yakushima Isl.*: Anbo (Aug. 1, 1957, S. S. & M. T., *Y-64*).
15. **Puccinia tokyensis** Sydow, Monogr. Ured. I, p. 377, 1902. HAB. II. On *Cryptotaenia japonica* Hassk. (*Mitsuba-zeri*). *Yakushima Isl.*: Yoshida~Nagata (Aug. 10, 1957, S. S. & M. T., *Y-53*).

16. *Uredo alocasiae* Sydow, Monogr. Ured. IV, p. 521, 1924.
HAB. II. On *Alocasia macrorrhiza* R. Br. (*Kuwazu-imo*). *Yakushima Isl.*: Nagata (Aug. 11, 1957, S. S. & M. T., Y-56).
17. *Uredo sawadae* S. Ito et Otani ex S. Ito & Murayama in Transact. Sapporo Nat. Hist. Soc. XVII, 171, 1943. HAB. II. On *Ficus carica* L. (*Ichijiku*) (cult.). *Tanegashima Isl.*: Nishinoomote-machi (Aug. 15, 1957, S. S. & M. T., Tu-56). *Yakushima Isl.*: Onoaida ~Kurio (Aug. 7, 1957, S. S. & M. T., Y-69).
18. *Aecidium mori* Barclay in Jour. Asiatic Soc. Bengal, LX, pt. 2, p. 226, 1891. HAB. I. On *Morus australis* Poir. (*Shima-guwa*). *Yakushima Isl.*: Anbo~Haro (Aug. 6, 1957, S. S. & M. T., Y-59).

2. Species of Uredinales newly found in the Okinawa Islands

There are 146 species of Uredinales have been recorded by the writers (2) from Okinawa Island and its adjoining islands. The following 6 species including a new species, *Uromyces thermopsidicola* Shimabukuro are considered new additions to the rust-flora of the Okinawa Islands. Among them, *Puccinia cenchri* Dietel et Holway is new to Japan.

1. *Melampsora coleosporioides* Dietel in Bot. Jahrb. XXXII, p. 50, 1902. HAB. II. On *Salix babylonica* L. (*Shidare-yanagi*) (cult.). *Okinawa Isl.*: Chinen-mura (Apr. 4, 1955, M. T., Ok-1018).

2. *Uromyces thermopsidicola* Shimabukuro, nov. spec.

SYN. *Uredo thermopsidicola* Hiratsuka, f. ex Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus, I, p. 44, 1954.

Status uredosporiferii = *Uredo thermopsidicola* Hiratsuka, f.

Soris teleutosporiferis hypophyllis, sparsis vel aggregatis, minutis vel mediocribus, rotundatis, 0.18~0.4 mm diam., primo epidermide tectis, dein nudis, obscure brunneis; teleutosporis globosis vel ellipsoideis, apice papillula minutissima hyalina auctis, unique minute et densiuscule verruculosis, brunneis, 20~30×15~20 μ ; episporio 2~4 μ crasso; pedicello brevi, hyalino, deciduo. HAB. II, III. On *Thermopsis chinensis* Benth. (*Kuso-endo*). *Okinawa Isl.*: Miwa-mura (June 12, 1955, M. Tamori, Ok-1003, type!).

The present species is closely



Fig. 1. Teleutospores of *Uromyces thermopsidicola* Shimabukuro on *Thermopsis chinensis* Benth. (Miwa-mura, Okinawa Isl., June 12, 1955, M. Tamori, Ok-1003, type!).

allied to *Uromyces striatus* Schröter and *U. thermopsisidis* Sydow, and it can be easily distinguished from the latter species by the larger teleutospores as well as by the characters of the uredospores.

3. *Uromyces saururi* Hennings in *Hedwigia*, XLI, p. (19), 1902. HAB. I. On *Saururus chinensis* Bail. (*Han-gesho*). Okinawa Isl.: Chinen-mura (March 7, 1957, S. S., Ok-1001; Apr. 17, 1955, M. T., Ok-1019).

4. *Puccinia cenchri* Dietel et Holway in *Bot. Gaz.* XXIV, p. 28, 1906. HAB. II, III. On *Cenchrus calyculatus* Cav. (*Kurinoiga*). Okinawa Isl.: Iemura (May 23, 1954, S. S., Ok-1012); Miwa-mura (June 12, 1955, M. T., Ok-1013). The present species is new to Japan, and *Cenchrus calyculatus* is a new host plant for it.

5. *Puccinia hordei* Otth in *Mitteil. Naturforsch. Ges. Bern* (1870), p. 114, 1871. HAB. II, III. On *Hordeum vulgare* L. var. *nudum* Hook. f. (*Hadaka-mugi*) (*cult.*). Okinawa Isl.: Nago-machi (May 9, 1953, S. S., Ok-1002).

6. *Xenostele sakamotoi* (Hiratsuka, f. et Yoshinaga) S. Ito et Murayama in *Transact. Sapporo Nat. Hist. Soc.* XVII, p. 170, 1943. HAB. III. On *Distylium racemosum* Sieb. et Zucc. (*Isunoki*). Okinawa Isl.: Kunigami-mura (Feb. 10, 1956, S. S., Ok-1008).

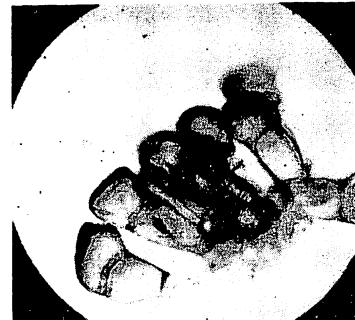


Fig. 2. Teleutospores of *Puccinia cenchri* Diet. et Holw. (Miwa-mura, Okinawa Isl., June 12, 1955, M. Tamori, Ok-1013).

3. Species of Uredinales newly found in the Southern Ryukyu Islands

There are 69 species of Uredinales have been recorded by the writers (3) in 1956 from the Southern Ryukyu Islands including the two island-groups; Miyako and Yaeyama. Since then, a number of species of Uredinales were found by Shimabukuro and M. Tamori from the islands, and among them, the following 16 species are newly added to the rust-flora of the islands.

1. *Melampsora coleosporioides* Dietel in *Bot. Jahrb.* XXXII, p. 50, 1902. HAB. II. On *Salix babylonica* L. (*Shidare-yanagi*) (*cult.*). Ishigaki Isl.: Uehara (July 15, 1957, S. Higashihirachi, Yae-317).

2. *Phakopsora formosana* Sydow in *Ann. Myc.* XII, p. 109, 1914. HAB. II. On *Glochidion obovatum* Sieb. et Zucc. (*Kankonoki*). Ishigaki Isl.: Nagura (Aug. 10, 1956, M. T., Yae-316).

3. **Phakopsora glochidii** (Syd.) Arthur in Bull. Torr. Bot. Club, XLIV, p. 508, 1917. HAB. II. On *Glochidion hongkongense* Müll.-Arg. (*Kakiba-kankonoki*). *Ishigaki Isl.*: Mt. Omoto (Aug. 21, 1956, M. T., Yae-319); Nagura (Aug. 10, 1956, M. T., Yae-322); Ohama-cho (Aug. 25, 1954, M. T., Yae-163).
4. **Phakopsora zizyphi-vulgaris** Dietel in Ann. Myc. VIII, p. 1910. HAB. II, III. On *Colubrina asiatica* Brong. (*Yaeyama-hamanatsume*). *Ishigaki Isl.*: Ohama-cho (Feb. 21, 1955, S. S., Yae-251; Feb. 2, 1955, M. T., Yae-238).
5. **Dasturella divina** (Syd.) Mundkur et Kheswalla in Mycologia, XXXV, p. 202, 1943. HAB. II. On *Leleba vulgaris* Nakai (*Daisanchiku*). *Iriomote Isl.*: Komi (Aug. 15, 1955, M. T., Yae-291).
6. **Uromyces appendiculatus** Link in Ges. Nat. Freunde Berlin Mag. VII, p. 28, 1815. HAB. II, III. On *Phaseolus vulgaris* L. (*Ingen-mame*) (*cult.*). *Ishigaki Isl.*: Nagura (Aug. 10, 1956, M. T., Yae-321).
7. **Puccinia arthraxonis-ciliaris** Cummins in Uredineana, IV, p. 16 & fig. 9, 1953. HAB. II. On *Arthraxon hispidus* Mak. (*Kobunagusa*). *Yonaguni Isl.*: Kubira (Aug. 4, 1955, M. T., Yae-265).
8. **Puccinia cenchri** Dietel et Holway in Bot. Gaz. XXIV, p. 28, 1897. HAB. II, III. On *Cenchrus calyculatus* Cav. (*Kurinoiga*). *Ishigaki Isl.*: Ishigaki-shi (June 24, 1954, S. S., Yae-253); Ohama-cho (Aug. 12, 1956, M. T., Yae-339).
9. **Puccinia congesta** Berkeley et Broome in Jour. Linn. Soc. XI, p. 91, 1871. HAB. III. On *Persicaria umbellata* Nakai (*Tsuru-soba*). *Ishigaki Isl.*: Ishigaki-shi (Aug. 5, 1953, M. T., Yae-154).
10. **Puccinia kyllingiae-brevifoliae** Miura ex S. Ito & Homma in Transact. Sapporo Nat. Hist. Soc. XV, p. 128, 1938. HAB. II. On *Kyllingia brevifolia* Rottb. (*Hime-kugu*). *Miyako Isl.*: Hirara-shi (Dec. 3, 1955, S. S., M-92).
11. **Puccinia levigata** (Syd. et Butl.) Hiratsuka, f. ex Hiratsuka, f. & Yoshinaga in Mem. Tottori Agric. Coll. III, p. 315, 1935. HAB. II. On *Oplismenus patens* Honda (*Oba-chijimizasa*). *Iriomote Isl.*: Komi (Aug. 16, 1955, M. T., Yae-355).
12. **Puccinia triticina** Eriksson in Ann. Sci. Nat. (VIII), IX, p. 270, 1899. HAB. II, III. On *Triticum sativum* Lam. var. *vulgare* Hack. (*Ko-mugi*) (*cult.*). *Ishigaki Isl.*: Ishigaki-shi (Feb. 23, 1955, M. T., Yae-337); Ohama-cho (March 1, 1955, M. T., Yae-335).
13. **Phragmidium pauciloculare** (Diet.) Sydow, Monogr. Ured. III, p. 138 & pl. VI, fig. 60, 1912. HAB. II. On *Rubus parvifolius* L. (*Nawashiro-ichigo*). *Miyako Isl.*: Hirara-shi (Dec. 3, 1955, S. S., M-86).

14. *Aecidium elaeagni* Dietel in *Hedwigia*, XXXVII, p. 212, 1898.
HAB. 0, I. On *Elaeagnus glabra* Thunb. (*Tsuru-gumi*). *Yonaguni Isl.*: Mt. Urabu (Aug. 4, 1955, M. T., Yae-278).
15. *Uredo desmodii-pulchelli* Sydow in Oesterr. Bot. Zeits. LII, p. 184, 1902. HAB. II. On *Desmodium caudatum* DC. (*Misonaoshi*). *Ishigaki Isl.*: Mt. Omoto (Aug. 29, 1956, M. T., Yae-320).
16. *Uredo paspalina* Sydow in Ann. Myc. XV, p. 177, 1917.
HAB. II. On *Paspalum scrobiculatum* L. var. *orbiculare* Hack. (*Suzume-no-kobie*). *Yonaguni Isl.*: Mt. Urabu (Aug. 7, 1955, M. T., Yae-282).

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1. Hiratsuka, Naohide (1955): Uredinological Studies.
2. Hiratsuka, Naohide & Shimabukuro, S. (1954): Uredinales of the Ryukyu Islands. (Sci. Bull. Facul. Agric. Univ. Ryukyus, no. 1: 1~56 & 2 pl.).
3. Hiratsuka, Naohide & Shimabukuro, S. (1955): Uredinales of the Southern Ryukyu Islands. (Sci. Bull. Agric. & Home Econ. Div., Univ. Ryukyus, no. 2: 4~15).
4. Hiratsuka, Naohide, Shimabukuro, S. & Niiro, Y. (1955): Uredinales of the Amami Islands. (Sci. Bull. Agric. & Home Econ. Div., Univ. Ryukyus, no. 2: 16~37).
5. Hiratsuka, Naohide, Shimabukuro, S. & Niiro, Y. (1956): Uredinales of the Tokara Islands. (Sci. Bull. Agric. & Home Econ. Div., Univ. Ryukyus, no. 3: 1~18).
6. Hiratsuka, Naohide, Shimabukuro, S. & Sato, S. (1955): Uredinales of the Satsunan Islands. (Sci. Bull. Agric. & Home Econ. Div., Univ. Ryukyus, no. 2: 38~59).
7. Katsuki, S. (1955): Parasitic fungus flora of Yaku-Island, Kyushu. I, II. (Jour. Jap. Bot. XXX: 282~288, 370~376).

琉球列島錆菌フローラ資料 I (摘要)

平塚直秀・島袋俊一

1. 薩南群島（屋久島、種子ヶ島）所産の錆菌類はすでに 126 種報告されているが、1957 年 8 月、筆者の 1 人島袋および田盛正雄君は同群島において新に 18 種の錆菌を発見採集した。これらのうち、*Milesina vogesiaca* (Faull) Sydow, *Melampsora coleosporioides* Dietel, *Puccinia asparagi-lucidi* Dietel および *Uredo sawadae* S. Ito et Otani の 4 種は琉球列島において今回はじめて発見された種類である。

2. 沖縄群島所産錆菌類の既知種は 146 種であるが、今回、さらに 6 種を同群島錆菌フローラに加えることができた。これらのうち、*Uromyces thermopsisidicola* Shimabukuro (クソエンドウに寄生) は新種であり、*Puccinia cenchri* Dietel et Holway (クリノイガに寄生) は日本列島において初めて採集されたものである。

3. 南部琉球諸島（宮古群島、八重山群島）所産錆菌類の既知種は 69 種であるが、今回、島袋および田盛君らによって採集された 16 種を新に南部琉球諸島産として加えることができた。