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Uredinales of the Amami Islands¹⁾

By

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Amami Islands comprise the islands lying from 27°30' to 30° N. Lat. and from 128° to 130°01' E. Long., from Tokara island group on the north to Yoron island group on the south, including the following island groups; Tokara, Oshima, Kikai, Tokunoshima, Okierabu and Yoron. Among these, Oshima Island is the largest; it is situated 463 km. from the main island Kyushu.

The first scientific record of rust fungi from the Amami Islands was made by Hiratsuka, one of the present authors(1) in a paper published in 1937. In his paper, the following three species, *Uromyces pyriformis* Cooke, *Puccinia congesta* Berk. et Br. and *Hemileia Gardeniae-floridiae* Sawada were reported on the basis of specimens collected by T. Tamotsu in the island of Oshima. Since that time up to 1954, there has been one species recorded by Hiratsuka (2~4) in 1938, 2 species in 1940 and 7 species in 1952, based upon collections made by Tamotsu. In 1954, Hiratsuka and Shimabukuro(6) reported 11 genera and 46 species of rust fungi from the islands chiefly based upon collections made by Niro, another of the present authors, from different localities of Oshima in December, 1953 to January of the next year.

The materials described in the present work are, besides already-mentioned collections by Tamotsu, and by Niro, those made by Niro in August to September, 1954 and December, 1954 to January of the next year, and those collected by S. Katsuki and Y. Morimoto in 1954 and 1955. The number of specimens totals more than five hundred, amongst which are included 108 species. The following table shows the number of species, by genera, heretofore known from the islands, additions to the list made in the present paper and the total.

¹⁾ Contributions from the Laboratories of Phytopathology and Mycology, Faculty of Agriculture, Tokyo University of Education. no. 25, also, Contributions from the Agriculture and Home Economics Division, University of the Ryukyus. no. 3.

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Number of species of rust fungi in the Amami Islands

Families	Genera	Number of species			
		Previously reported	Present additions	Total	
Melampsoraceae	<i>Uredinopsis</i>	—	1	1	37
	<i>Milesina</i>	—	4	4	
	<i>Hyalopsora</i>	—	1	1	
	<i>Pucciniastrum</i>	2	3	5	
	<i>Melampsora</i>	—	2	2	
	<i>Phakopsora</i>	2	8	10	
	<i>Crossopsora</i>	—	2	2	
	<i>Coleopucciniella</i>	—	1	1	
	<i>Dasturella</i>	—	1	1	
	<i>Coleosporium</i>	4	6	10	
Pucciniaceae	<i>Didymopsorella</i>	—	1	1	61
	<i>Tranzschelia</i>	—	1	1	
	<i>Kuehneola</i>	2	—	2	
	<i>Hamaspora</i>	1	—	1	
	<i>Poliotelium</i>	—	1	1	
	<i>Phragmidium</i>	—	2	2	
	<i>Hemileia</i>	1	—	1	
	<i>Nothoravenelia</i>	—	1	1	
	<i>Pileolaria</i>	1	—	1	
	<i>Uromyces</i>	7	8	15	
	<i>Puccinia</i>	20	14	34	
<i>Endophyllum</i>	—	1	1		
Uredinales Imperfecti	<i>Aecidium</i>	5	—	5	10
	<i>Uredo</i>	1	4	5	
Total		46	59	108	

As shown in the table, there are 24 genera and 108 species including 10 species of the two form-genera, *Aecidium* and *Uredo*, which were found in the Amami Islands.

The specimens studied are all kept in the Hiratsuka Herbarium, Tokyo, Japan, while duplicates of those specimens are deposited in the Herbarium of University of the Ryukyus.

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Enumeration of species

MELAMPSORACEAE

1. **Uredinopsis macrosperma** Magnus in Hedwigia, XLIII, p. 122, 1904.

Hab. II, (III). On *Pteridium aquilinum* Kuhn var. *japonicum* Nakai (*Warabi*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1778).

2. **Milesina Coniogrammes** Hiratsuka, f. in Bot. Mag. Tokyo, XLVIII, p. 45 & text-fig. 6, 1934.

Hab. II, (III). On *Plagiogyria japonica* Nakai (*Kijinoo-shida*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 2346; Jan. 1, 1955, Y. N., no. 2347).

3. **Milesina exigua** Faull in Jour. Arnold Arboretum, XII, p. 219, 1931.

Hab. II, (III). On *Microlepia strigosa* Presl. (*Ishikaguma*). Oshima Isl.: Yamato-mura (Jan. 1, 1955, Y. M., no. 1777); Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1776); Santaro-toge (Jan. 6, 1955, Y. M., no. 2024).

4. **Milesina microspora** Hiratsuka, f. in Bot. Mag. Tokyo, XLVIII, p. 43, 1934.

Hab. II, III. On *Cyclosorus acuminatus* Nakai (*Ho-shida*). Oshima Isl.: Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1775); Yamato-mura (Dec. 31, 1954, Y. M., no. 1774); Santaro-toge (Jan. 6, 1955, Y. M., no. 1772).

5. **Milesina pteridicola** Hiratsuka, f. in Hiratsuka, f. & Yoshinaga in Mem. Tottori Agric. Coll. III, p. 256, 1935.

Hab. II, III. On *Pteris Fauriei* Hieron. (*Shima-hachijyo-shida*). Oshima Isl.: Mikata-mura (Jan. 6, 1955, Y. N., no. 1772).

6. **Hyalopsoara Polypodii** (Diet.) Magnus in Ber. Deutsch. Bot. Ges. XIX, p. 582, 1901.

Hab. II, (III). On *Blechnopsis orientalis* Presl. (*Hiryu-shida*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1768).

¹⁾ The following abbreviations are used for the name of the collectors most frequently named in the list: Y. M.=Yasuji Morimoto (森本泰二); Y. N.=Yoshima Niro (新納義馬); S. K.=Shigetaka Katsuki (香月繁孝); T. T.=Torataro Tamotsu (保虎太郎).

II, (III). On *Diplazium maximum* Christ. (*Hiroha-nokogirishida*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1770; Jan. 1, 1955, Y. N., no. 1771).

II, (III). On *Diplazium oshimense* H. Ito (*Shike-shida*). Oshima Isl.: Sumiyo-mura (Dec. 30, 1954, Y. N., no. 1769).

7. **Pucciniastrum Actinidiae** Hiratsuka, f. in Mem. Tottori Agric. Coll. IV, p. 279, 1936; Jour. Jap. Bot. XXVII, p. 111, 1952.

Hab. II, III. On *Actinidia rufa* Planch. (*Nashikadzura*). Oshima Isl.: Yamato-mura (Jan. 1, 1955, Y. M., no. 1864; Jan. 7, 1955, Y. N., no. 1865); Sumiyo-mura (Dec. 29, 1954, Y. N., no. 1866); Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1867); Shin-mura (Dec. 30, 1954, Y. M., no. 1868); Tatsugo-mura (Dec. 27, 1953, Y. N., no. 1869); Mikata-mura (Jan. 6, 1955, Y. N., no. 1870). Tokuno-shima Isl.: Mt. Mikyo-dake (Sept. 14, 1954, Y. N., no. 1871); Kametsu-machi (Sept. 16, 1954, Y. N., no. 1872).

8. **Pucciniastrum Agrimoniae** (Diet.) Tranzschel in Script. Bot. Hort. Univ. Petropol. IV, p. 301, 1895. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 7, 1954).

Hab. II, (III). On *Agrimonia pilosa* Ledeb. var. *japonica* Nakai (*Kinmidzuhiki*). Oshima Isl.: Yamato-mura (Dec. 31, 1954 & Jan. 1, 1955, Y. M., nos. 1856 & 1857); Santaro-toge (Dec. 29, 1954 & Jan. 6, 1955, Y. M., nos. 1858 & 1859); Mt. Yuwan-dake (Dec. 30, 1954, Y. M., no. 1861; Dec. 30, 1954, Y. N., no. 1862); Mikata-mura (Oct. 6, 1954, S. K., no. 1863; July 23, 1936, T. T., no. 1118).

9. **Pucciniastrum Boehmeriae** Sydow in Ann. Myc. I, p. 19, 1903.

Hab. II, III. On *Boehmeria frutescens* Thunb. var. *viridula* Suzuki (*Nokaramushi*). Kikai-shima Isl.: Somachi-mura (Aug. 29, 1954, Y. N., no. 1855).

10. **Pucciniastrum hikosanense** Hiratsuka, f. in Ann. Phytopath. Soc. Japan, X, p. 154, 1940.

Hab. II, III. On *Acer insulare* Mak. (*Shima-urikaede*). Oshima Isl.: Uken-mura (Dec. 30, 1954, Y. N., no. 1816); Sumiyo-mura (Dec. 30, 1954, Y. N., no. 1817); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1818); Santaro-toge (Jan. 6, 1955, Y. M., no. 1819); Mikata-mura (Oct. 6, 1954, S. K., no. 1820); Shin-mura (Dec. 30, 1954, Y. M., no. 1822).

11. **Pucciniastrum Styraacinum** Hiratsuka in Bot. Mag. Tokyo, XII, p. 82 & pl. II, figs. 7~13, 1898. (Hiratsuka, f. & Shimabukuro

in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 7, 1954).

Hab. II, III. On *Styrax japonica* Sieb. et Zucc. (*Ego-no-ki*). Oshima Isl.: Kasari-mura (Dec. 25, 1953, Y. N., no. 1172); Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1812); Mikata-mura (Oct. 6, 1954, S. K., no. 1811; Jan. 6, 1955, Y. N., no. 1813); Santaro-toge (Jan. 6, 1955, Y. M., no. 1814); Sumiyo-mura (Sept. 23, 1954, Y. N., no. 1815). Tokuno-shima Isl.: Amagi-mura (Sept. 15, 1954, Y. N., no. 1810); Mt. Inokawa-dake (Sept. 19, 1954, Y. N., no. 1809); Isen-mura (Sept. 16, 1954, Y. N., no. 1808).

12. **Melampsora Idesiae** Miyabe ex Hiratsuka in Bot. Mag. Tokyo, XI, p. 45 & pl. IV, figs. 1~3, 1897.

Hab. II, III. On *Cathayaia polycarpa* Ohwi (*Idesia polycarpa* Maxim.) (*Igiri*). Oshima Isl.: Uken-mura (Dec. 30, 1954, Y. N. no. 1875); Sumiyo-mura (Dec. 30, 1954, Y. N., no. 1876).

13. **Melampsora Yoshinagai** Hennings in Hedwigia, XLII, p. (108), 1903.

Hab. II, (III). On *Wikstroemia phymatoglossa* Koidz. (*Oshima-gampi*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1873).

14. **Phakopsora Ampelopsidis** Dietel et Sydow in Dietel in Hedwigia, XXXVII, p. 217, 1898. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 8, 1954).

Hab. II, III. On *Ampelopsis brevipedunculata* Trautv. var. *Maximowiczii* Rehd. (*No-budo*). Oshima Isl.: Nase-shi (Oct., 1936, T. T., no. 1159); Kasari-mura (Jan. 4, 1955, Y. M., nos. 1596 & 1597); Tatsugo-mura (Dec. 28, 1953 & Aug. 25, 1954, Y. N., nos. 1178 & 1598); Sumiyo-mura (Dec. 29, 1954, Y. N., no. 1599); Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1600); Mikata-mura (Oct. 7, 1954, S. K., no. 1601; Jan. 6, 1955, Y. N., no. 1602); Yamato-mura (Dec. 31, 1954, Y. M., no. 1603); Shin-mura (Dec. 29, 1954, Y. M., no. 1604); Chinzei-mura (Sept. 21, 1954, Y. N., no. 1606). Kikai-shima Isl.: Kikai-machi (Aug. 28, 1954, Y. N., no. 1607). Tokuno-shima Isl.: Isen-mura (Sept. 19, 1954, Y. N., no. 1608); Mt. Inokawa-dake (Sept. 19, 1954, Y. N., no. 1609).

II, (III). On *Vitis vinifera* L. (*Budo*) (*cult.*). Oshima Isl.: Nase-shi (Oct. 3, 1954, S. K., no. 1610); Chinzei-mura (Sept. 22, 1954, Y. N., no. 1611).

15. **Phakopsora Artemisiae** Hiratsuka, f. in Jap. Jour. Bot. III, p. 298, 1927.

Hab. II, (III). On *Artemisia* sp. Oshima Isl.: Nase-shi (Oct., 1936, T. T., no. 1734).

16. **Phakopsora Ehretiae** Hiratsuka in Bot. Mag. Tokyo, XIV, p. 91 & pl. III, figs. 10~13, 1900.

Hab. II, III. On *Ehretia ovalifolia* Hassk. (*Chisha-no-ki*). Tokuno-shima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1579).

17. **Phakopsora Fici-erectae** Ito et Otani in Bot. & Zool. IX, p. 663 & text-fig. 2, 1941 (nom. seminud.); Ito & Murayama in Transact. Sapporo Nat. Hist. Soc. XVIII, p. 85, 1949.

Hab. II, III. On *Ficus erecta* Thunb. (*Inu-biwa*). Oshima Isl.: Kasari-mura (Dec. 26, 1953, Y. N., no. 1580; Jan. 4 & 5, 1955, Y. M., nos. 1581 & 1582); Santaro-toge (Jan. 6, 1955, Y. M., no. 1583); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1584; Jan. 1, 1954, Y. N., no. 1585); Mikata-mura (Oct. 4, 1954, S. K., no. 1586); Sumiyo-mura (Sept. 23, 1954, Y. N., no. 1587); Tatsugo-mura (Aug. 26, 1954, Y. N., no. 1588). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1578). Tokuno-shima Isl.: Isen-mura (Sept. 15, 1954, Y. N., no. 1592); Mt. Inokawa-dake (Sept. 14, 1954, Y. N., no. 1593).

II, (III). On *Morus australis* Poir. (*Shima-guwa*). Oshima Isl.: Sumiyo-mura (Dec. 29, 1954, Y. N., no. 1591); Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1590). Kikai-shima Isl.: Kikai-machi (Aug. 28, 1954, Y. N., no. 1589). Tokuno-shima Isl.: Mt. Mikyo-dake (Sept. 15, 1954, Y. N., no. 1594).

18. **Phakopsora formosana** Sydow in Ann. Myc. XII, p. 109, 1914.

Hab. II, III. On *Glochidion Hayatae* Croizat et Hara (*Urajiro-kankonoki*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1570); Uken-mura (Dec. 30, 1954, Y. N., no. 1571).

19. **Phakopsora Glochidii** (Syd.) Arthur in Bull. Torr. Bot. Club, XLIV, p. 508, 1917.

Hab. II, III. On *Glochidion hongkongense* Müll.-Arg. (*Kakiba-kanko-no-ki*). Tokuno-shima Isl.: Amagi-mura (Sept. 15, 1954, Y. N., no. 1577).

20. **Phakopsora incompleta** (Syd.) Cummins in Mycologia, XLII, p. 786, 1950. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 9, 1954).

Hab. II, (III). On *Microstegium vimineum* A. Camus (*Hime-ashiboso*). Oshima Isl.: Nase-shi (March, 1936, T. T., no. 1147).

21. **Phakopsora Malloti** Cummins in Mycologia, XLII, p. 783 & fig. 3, 1950.

Hab. II, (III). On *Mallotus japonicus* Müll.-Arg. (*Akamegashiwa*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1569).

22. **Phakopsora Pachyrhizi** Sydow in Ann. Myc. XII, p. 108, 1914.

Hab. II, III. On *Glycine Max* Merr. (*Daidzu*) (*cult.*). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1568).

23. **Phakopsora tecta** Jackson et Holway in Jackson in Mycologia, XVIII, p. 148 & pl. XIX, 1926.

Hab. II, III. On *Commelina nudiflora* L. (*Hadaka-tsuyukusa*, *Shima-tsuyukusa*). Oshima Isl.: Tatsugo-mura (Dec. 27, 1953, Y. N., no. 1575); Mikata-mura (Jan. 6, 1955, Y. N., no. 1573). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1574). Tokunoshima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1575); Amagimura (Sept. 14, 1954, Y. N., no. 1576).

24. **Crossopora Antidesmae-dioicae** (Syd.) Arthur et Cummins in Philippine Jour. Sci. LXI, p. 474, 1936.

Hab. II, (III). On *Antidesma japonicum* Sieb. et Zucc. (*Yamahihatsu*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1731); Mikata-mura (Jan. 6, 1955, Y. N., no. 1732); Santaro-toge (Jan. 6, 1955, Y. N., no. 1733).

25. **Crossopora Premnae** (Petch) Sydow in Ann. Myc. XVI, p. 243, 1918.

Hab. II, (III). On *Premna obtusifolia* R. Br. (*Taiwan-uokusagi*). Kikai-shima Isl.: Kikai-machi (Aug. 28, 1954, Y. N., no. 1712).

26. **Coleopucciniella Idei** Hiratsuka, f. in Jour. Jap. Bot. XIII, p. 245, 1937.

Hab. III. On *Rhaphiolepis umbellata* Mak. (*Sharinbai*). Oshima Isl.: Mikata-mura (Jan. 6, 1955, Y. N., no. 1713).

27. **Dasturella divina** (Syd.) Mundkur et Kheswalla in Mycologia, XXXV, p. 202, 1943.

Hab. II, (III). On *Leleba vulgaris* Nakai (*Daisan-chiku*). Oshima Isl.: Sumiyo-mura (Dec. 29, 1954, Y. N., no. 1646).

28. **Coleosporium Asterum** (Diet.) Sydow in Ann. Myc. XII, p. 109, 1914. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 11, 1954).

Hab. II, III. On *Kalimeris indica* Schultz-Bip. (*Ko-yomena*). Oshima Isl.: Tatsugo-mura (Dec. 28, 1953, Y. N., no. 1192); Nase-shi (March, 1935, T. T., no. 1035); Mikata-mura (Jan. 6, 1955, Y. N., no. 1729). Kikai-shima Isl.: Kikai-machi (Aug. 30, 1954, Y. N., no. 1730). Tokuno-shima Isl.: Amagi-mura (Sept. 14, 1954, Y. N., no. 1728).

29. **Coleosporium Bletiae** Dietel in Hedwigia, XXXVII, p. 216, 1898.

Hab. II, (III). On *Calanthe discolor* Lindl. (*Ebine*). Oshima Isl.: Santaro-toge (Jan. 6, 1955, Y. M., no. 1711).

30. **Coleosporium Campanulae** Léveillé in Ann. Sci. Nat. (III), VIII, p. 373, 1847.

Hab. II, III. On *Adenophora triphylla* DC. var. *insularis* Kitamura (*Ryukyu-shajin*). Oshima Isl.: Koniya-machi (Oct. 5, 1954, S. K., no. 1710); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., nos. 1708 & 1709).

31. **Coleosporium Carpesii** Saccardo in Riv. Acc. di Padova, XXIV, p. 208, 1874. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 12, 1954).

Hab. II, III. On *Carpesium abrotanoides* L. (*Yabutabirako*). Oshima Isl.: Tatsugo-mura (Dec. 27, 1953, Y. N., no. 1175).

II, III. On *Carpesium cernuum* L. (*Ko-yabutabako*). Oshima Isl.: Mikata-mura (Jan. 6, 1955, Y. N., no. 1648); Shin-mura (Dec. 30, 1954, Y. M., no. 1649); Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1650); Uken-mura (Dec. 30, 1954, Y. N., no. 1651).

II, (III). On *Carpesium divaricatum* Sieb. et Zucc. (*Gankubisso*). Oshima Isl.: Shin-mura (Dec. 30, 1954, Y. M., no. 1653); Mikata-mura (Oct. 6, 1954, S. K., no. 1652).

32. **Coleosporium Clematidis** Barclay in Jour. Asiatic Soc. Bengal, LIX, pt. 2, p. 89 & pl. VI, figs. 3 & 5, 1890.

Hab. II, III. On *Clematis Maximowicziana* Franch. et Sav. (*Senninso*). Oshima Isl.: Yamato-mura (Dec. 31, 1954, Y. M., no. 1645); Tatsugo-mura (Jan. 4, 1955, Y. M., no. 1644).

II, III. On *Clematis Leschenaultiana* DC. (*Birodo-botandzuru*). Oshima Isl.: Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1647).

33. **Coleosporium Clerodendri** Dietel in Bot. Jahrb. XXVII, p. 566, 1899.

Hab. II, III. On *Clerodendron trichotomum* Thunb. (*Kusagi*). Oshima Isl.: Nase-shi (Dec. 28, 1954, Y. M., no. 1625); Kasari-mura

(Jan. 4, & 5, 1955, Y. M., nos. 1627 & 1628); Mikata-mura (Jan. 6, 1955, Y. N., no. 1631; Oct. 4, 1954, S. K., no. 1629); Shin-mura (Dec. 30, 1954, Y. M., no. 1630); Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1632); Sumiyo-mura (Sept. 22, 1954, Y. N., no. 1633); Tatsugomura (Aug. 26, 1954, Y. N., no. 1634). Tokuno-shima Isl.: Isenmura (Sept. 16, 1954, Y. N., no. 1635); Amagi-mura (Sept. 16, 1954, Y. N., no. 1636).

34. **Coleosporium Evodiae** Dietel in Ann. Myc. VII, p. 355, 1909. (Hiratsuka, f. in Bot. Mag. Tokyo, LIV, p. 373, 1940; Mem. Facul. Agric. Tokyo Univ. Education, I, p. 27, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 13, 1954).

Hab. II, III. On *Evodia glauca* Miq. (*Shima-kuroki*). Oshima Isl.: Kamaoto-mura (Jan. 1, 1955, Y. M., no. 1637); Uken-mura (Dec. 30, 1954, Y. M., no. 1643); Shin-mura (Dec. 30, 1954, Y. M., no. 1638); Mikata-mura (Oct. 20, 1936, T. T., no. 2347); Mt. Yuwandake (Jan. 1, 1954, Y. N., no. 1639). Tokuno-shima Isl.: Isenmura (Sept. 15, 1954, Y. N., no. 1640); Amagi-mura (Sept. 14, 1954, Y. N., no. 1641); Higashi-amagi-mura (Sept. 14, 1954, Y. N., no. 1642).

35. **Coleosporium Paederiae** Dietel in Ann. Myc. VII, p. 355, 1909.

Hab. II, (III). On *Paederia chinensis* Hance. (*Yaitobana*). Oshima Isl.: Kasari-mura (Jan. 4, 1955, Y. M., no. 1723); Koniya-machi (Jan. 7, 1955, Y. M., no. 1724); Shin-mura (Dec. 30, 1954, Y. M., no. 1725); Santaro-toge (Dec. 29, 1954, Y. M., no. 1727).

36. **Coleosporium Perillae** Sydow in Hedwigia, XXXVIII, p. (141), 1899.

Hab. II, III. On *Orthodon grosseserratum* Kudo (*Hime-jiso*). Oshima Isl.: Sumiyo-mura (Oct. 5, 1954, S. K., no. 1675).

II, III. On *Orthodon punctulatum* Ohwi (*Inu-kojyu*). Oshima Isl.: Chinzei-mura (Sept. 22, 1954, Y. N., no. 1676); Mt. Yuwandake (Dec. 31, 1954, Y. N., no. 1677). Tokuno-shima Isl.: Mt. Inokawa-dake (Sept. 16, 1954, Y. N., no. 1678).

37. **Coleosporium Xanthoxyli** Dietel et Sydow in Dietel in Hedwigia, XXXVII, p. 217, 1898. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 14, 1954).

Hab. II, III. On *Fagara ailanthoides* Engl. (*Karasu-zansho*). Oshima Isl.: Mt. Yuwan-dake (Jan. 1, 1954, Y. N., no. 1702); Sumiyo-mura (Sept. 22, 1954, Y. N., no. 1703); Kasari-mura (Dec. 23, 1953, Y. N., no. 1206).

II, III. On *Fagara Fauriei* Nakai (*Ko-garasuzansho*). Oshima Isl.: Shin-mura (Dec. 30, 1954, Y. M., no. 1704).

II, III. On *Fagara mantchuria* Honda (*Inu-zansho*). Oshima Isl.: Kasari-mura (Jan. 5, 1955, Y. M., no. 1705).

II, III. On *Fagara okinawaensis* Nakai (*Shima-inuzansho*). Oshima Isl.: Kasari-mura (Jan. 5, 1955, Y. M., no. 1706). Tokunoshima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1707).

PUCCINIACEAE

38. **Didymoporella lemanensis** (Doidge) Hiratsuka, f. in Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 14, 1954.

Hab. 0, II, (III). On *Toddalia asiatica* Lam. (*Sarukake-mikan*). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1722).

39. **Tranzschelia discolor** (Fuck.) Tranzschel et Litwinow in Jour. Bot. XXIV, p. 248, 1939.

Hab. II, (III). On *Prunus salicina* Lindl. var. *typica* Nakai (*Sumomo*) (*cult.*). Oshima Isl.: Kasari-mura (Oct. 9, 1954, S. K., no. 1721).

40. **Kuehneola Callicarpae** Sydow in Sydow & Petrak in Ann. Myc. XXVI, p. 420, 1928. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 15, 1954).

Hab. 0, II, III. On *Callicarpa japonica* Thunb. var. *luxurians* Rehd. (*O-murasakishikibu*). Oshima Isl.: Kasari-mura (Dec. 25, 1953 & Jan. 2, 1954, Y. N., nos. 1179 & 1186); Santaro-toge (Dec. 29, 1954 & Jan. 6, 1955, Y. M., nos. 1715 & 1720); Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1716). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1717). Tokuno-shima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1718); Higashi-amagi-mura (Sept. 14, 1954, Y. N., no. 1719).

0, II, III. On *Callicarpa oshimensis* Hayata (*Oshima-murasaki*). Oshima Isl.: Santaro-toge (Jan. 6, 1955, Y. M., no. 2347).

41. **Kuehneola japonica** (Diet.) Dietel in Ann. Myc. X, p. 205, 1912. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 15, 1954).

Hab. III. On *Rosa Wichuraiana* Crep. var. *ampullicarpa* Honda (*Tokkuri-ibara*). Oshima Isl.: Kasari-mura (Jan. 2, 1954 & Jan. 3, 1955, Y. N., nos. 1186 & 1683; Jan. 5, 1955, Y. M., no. 1681).

42. **Hamaspora Rubi-Sieboldii** (Kawagoe) Dietel in Ann. Myc.

XX, p. 293, 1922. (Hiratsuka, f. in Jubilee Publ. Profs. Tochinai & Fukushi, p. 130, 1955; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 16, 1954).

Hab. II, III. On *Rubus Sieboldii* Bl. (*Horoku-ichigo*). Oshima Isl.: Kasari-mura (Dec. 23, 1953, Y. N., no. 1184); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1715); Uken-mura (Jan. 2, 1955, Y. N., no. 1716).

43. **Polioteliium hyalospora** (Sawada) Mains in Bull. Torrey Bot. Club, LXVI, p. 175, 1939.

Hab. 0, II, III. On *Acacia confusa* Merr. (*Soshijyu*). Oshima Isl.: Sumiyo-mura (Dec. 30, 1954, Y. N., no. 1679). Tokuno-shima Isl.: Isen-mura (Sept. 15, 1954, Y. N., no. 1680).

44. **Phragmidium griseum** Dietel in Bot. Jahrb. XXXII, p. 49, 1902.

Hab. II, III. On *Rubus rosaefolius* Sm. var. *Maximowiczii* Focke (*Ryukyū-baraichigo*). Oshima Isl.: Sumiyo-mura (Dec. 29, 1954, Y. N., no. 1637).

45. **Phragmidium Rosae-multiflorae** Dietel in Hedwigia, XLIV, p. 132, 345 & pl. IV, fig. 8, 1905.

Hab. (0, I), II, III. On *Rosa Wichuraiana* Crep. var. *ampullicarpa* Honda (*Tokkuri-ibara*). Oshima Isl.: Kasari-mura (Jan. 4 & 5, 1955, Y. M., nos. 1638 & 1639).

46. **Hemileia Gardeniae-floridae** Sawada in Transact. Nat. Hist. Soc. Formosa, XXI, p. 234, 1931 (nom. seminud.); Hiratsuka, f. & Yoshinaga in Mem. Tottori Agric. Coll. III, p. 274, 1935. (Hiratsuka, f. in Jour. Jap. Bot. XIII, p. 593, 1937; Bot. Mag. Tokyo, LIV, p. 373, 1940; Mem. Facul. Agric. Tokyo Univ. Education, I, p. 33, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 17, 1954).

Hab. II, (III). On *Gardenia jasminoides* Ell. var. *grandiflora* Nakai (*Kuchinashi*). Oshima Isl.: Tatsugo-mura (Oct. 15, 1936, T. T., no. 875); Mikata-mura (Dec. 28, 1954, Y. N., no. 1654); Mt. Yuwan-dake (Dec. 31, 1954, Y. N., no. 1655); Santaro-toge (Jan. 6, 1955, Y. M., no. 1656). Tokuno-shima Isl.: Mt. Inokawa-dake (Sept. 19, 1954, Y. N., no. 1657).

47. **Nothoravenelia japonica** Dietel in Ann. Myc. VIII, p. 310, 1910.

Hab. II, III. On *Securinega ramiflora* Müll.-Arg. (*Hitotsubahagi*). Kikai-shima Isl.: Kikai-machi (Oct. 9, 1954, S. K., no. 1714).

48. **Pileolaria Shiraiana** (Diet. et Syd.) Ito in Jour. Coll. Agric. Hokkaido Imp. Univ. XI, p. 273 & pl. IX, fig. 13, 1922. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 18, 1954).

Hab. II, III. On *Rhus succedanea* L. (*Haze-no-ki*). Oshima Isl.: Tatsugo-mura (Dec. 27, 1953 & Aug. 25, 1954, Y. N., nos. 1208 & 1668); Sumiyo-mura (Dec. 30, 1954, Y. N., no. 1667); Uken-mura (Dec. 30, 1954, Y. N., no. 1666); Santaro-toge (Jan. 6, 1955, Y. M., no. 1665); Shin-mura (Dec. 30, 1954, Y. M., no. 1664); Mt. Yuwandake (Dec. 30, 1954, Y. M., no. 1663); Yamato-mura (Dec. 31, 1954 & Jan. 1, 1955, Y. M., nos. 1662 & 1661); Koniya-machi (Oct. 5, 1954, S. K., no. 1660). Kikai-shima Isl.: Kikai-machi (Aug. 30, 1954, Y. N., no. 1659). Tokuno-shima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1658).

49. **Uromyces Acori** Ramakrishnan et Rangaswami in Current Science, XVII, p. 240~241, 1948.

Syn. *Uromyces pyriformis* (non Cooke) (Hiratsuka, f. in Jour. Jap. Bot. XIII, p. 588, 1937; Mem. Facul. Agric. Tokyo Univ. Education, I, p. 51, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 22, 1954).

Uromyces Sparganii Clinton et Peck subsp. *asiaticus* Parmelee et Savile in Mycologia, XLVI, p. 833, 1954.

Hab. II, (III). On *Acorus asiaticus* Nakai (*Acorus Calamus* L. var. *angustatus* Bess.) (*Shobu*). Oshima Isl.: Nase-shi (April 3, 1935, T. T., no. 1120; Oct. 3, 1954, S. K., no. 1840); Sumiyo-mura (Sept. 22, 1954, Y. N., no. 1841). Kikai-shima Isl.: Kikai-machi (Aug. 30, 1954, Y. N., no. 1842). Tokuno-shima Isl.: Amagi-mura (Sept. 15, 1954, Y. N., no. 1843).

50. **Uromyces Alopecuri** Seymour in Proc. Boston Soc. Nat. Hist. XXIV, p. 186, 1889. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 19, 1954).

Hab. II, III. On *Alopecurus geniculatus* L. (*Suzumenoteppo*). Oshima Isl.: Nase-shi (Sept., 1935, T. T., no. 1105).

51. **Uromyces appendiculatus** (Pers.) Unger, Einfl. d. Bodens, p. 216, 1836.

Hab. (0, I), II, III. On *Phaseolus vulgaris* L. (*Ingen-mame*) (*cult.*). Oshima Isl.: Kasari-mura (May, 1935, T. T., no. 2348).

52. **Uromyces azukicola** S. Hirata in Ann. Phytopath. Soc. Japan, XVI, p. 18 & text-fig. 3, 1952.

Hab. (0, I), II, III. On *Phaseolus angularis* Wight. (*Azuki*) (*cult.*). Kikai-shima Isl.: Soomachi-mura (Aug. 30, 1954, Y. N., no. 1852).

53. ***Uromyces Commelinae*** Cooke in Transact. Roy. Soc. Edinb. XXXI, p. 342, 1888.

Hab. II, (III). On *Commelina communis* L. (*Tsuyukusa*). Oshima Isl.: Nase-shi (Sept., 1935, T. T., no. 2351).

54. ***Uromyces coronatus*** Miyabe et Nishida ex Dietel in Bot. Centralbl. CV, p. 495, 1905. (Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 45, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 20, 1954).

Hab. II, III. On *Zizania latifolia* Turcz. (*Makomo*). Oshima Isl.: Nase-shi (Sept., 1935, T. T., no. 1006; Oct. 3, 1954, S. K., no. 1853); Tatsugo-mura (Aug. 26, 1954 & Dec. 29, 1953, Y. N., nos. 1854 & 1187).

55. ***Uromyces Itoanus*** Hiratsuka, f. in Hiratsuka, f. & Tobinaga in Ann. Phytopath. Soc. Japan, IV, p. 161, 1935.

Hab. II, III. On *Kummerowia striata* Schindl. (*Yahadzuso*). Tokuno-shima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1851).

56. ***Uromyces Lespedezae-procumbentis*** (Schw.) Curtis in Geol. Survey N. Car. III, p. 123, 1867. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 21, 1954).

Hab. (0, I), II, III. On *Lespedeza cuneata* G. Don (*Medohagi*). Oshima Isl.: Kasari-mura (Dec. 24, 1953, Y. N., no. 1209); Mt. Yuwan-dake (Jan. 1, 1954, Y. N., no. 1848). Kikai-shima Isl.: Kikai-machi (Aug. 28, 1954, Y. N., no. 1849). Tokuno-shima Isl.: Mt. Inokawa-dake (Sept. 16, 1954, Y. N., no. 1850).

57. ***Uromyces linearis*** Berkeley et Broome in Jour. Linn. Soc. XIV, p. 92, 1875.

Hab. II, III. On *Panicum repens* L. (*Hai-kibi*). Oshima Isl.: Koniya-machi (Jan. 7, 1955, Y. M., no. 1844); Nase-shi (Oct. 3, 1954, S. K., no. 1845).

58. ***Uromyces proeminens*** Léveillé in Ann. Sci. Nat. (III), VIII, p. 371 & 375, 1847.

Hab. (0, I), II, III. On *Chamaesyce Makinoi* Hara (*Kobanishikiso*). Oshima Isl.: Kasari-mura (Sept. 26, 1954, Y. N., no. 1846). Tokuno-shima Isl.: Isen-mura (Sept. 14, 1954, Y. N., no. 1848).

59. **Uromyces Saururi** Hennings in Hedwigia, XLI, p. (19), 1902.

Hab. I, III. On *Saururus Loureiri* Decne. (*Hangesho*). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1839).

60. **Uromyces Setariae-italicae** Yoshino in Bot. Mag. Tokyo, XX, p. 247, 1906.

Hab. II, (III). On *Setaria italica* Beauv. (*Awa*) (*cult.*). Kikai-shima Isl.: Kikai-machi (Aug. 29, 1954, Y. N., no. 1837).

II, (III). On *Setaria viridis* Beauv. (*Enokorogusa*). Oshima Isl.: Tatsugo-mura (Aug. 25, 1954, Y. N., no. 1838).

61. **Uromyces tenuicutis** McAlpine, Rusts of Australia, p. 87 & pl. XVI, fig. 133, 1906. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 23, 1954).

Hab. II, (III). On *Sporobolus indicus* R. Br. (*Nezuminoo*). Oshima Isl.: Nase-shi (Dec. 28, 1954, Y. M., no. 1836); Kasari-mura (Dec. 25, 1953, Y. N., no. 1182; Jan. 5, 1955, Y. M., no. 1835).

62. **Uromyces Vignae** Barclay in Jour. Asiatic Soc. Bengal, LX, p. 211, 1891. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 24, 1954).

Hab. (0, I), II, III. On *Vigna sinensis* Savi (*Sasage*) (*cult.*). Oshima Isl.: Nase-shi (Oct., 1935, T. T., no. 1104).

63. **Uromyces Wedeliae** Hennings in Hedwigia, XLIII, p. 150, 1904. (Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 53, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 24, 1954).

Hab. II, III. On *Wedelia biflora* DC. (*Shima-hamaguruma*). Oshima Isl.: Uken-mura (Dec. 20, 1936, T. T., no. 1094).

II, III. On *Wedelia robusta* (Mak.) Kitamura (*O-hamaguruma*). Oshima Isl.: Kasari-mura (Sept. 4, 1954, Y. N., no. 1834).

64. **Puccinia Angelicae** (Schum.) Fuckel in Jahrb. Nass. Ver. Nat. XXIII/XXIV, p. 52, 1870.

Hab. II, III. On *Peucedanum japonicum* Thunb. (*Botan-ninjin*). Kikai-shima Isl.: Soomachi-mura (Aug. 29, 1954, Y. N., no. 1669).

65. **Puccinia Arthraxonis-ciliaris** Cummins in Uredineana, IV, p. 16 & fig. 9, 1953.

Hab. II, (III). On *Arthraxon hispidus* Mak. (*Kobunagusa*). Oshima Isl.: Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1618); Tatsu-

go-mura (Dec. 29, 1954, Y. N., no. 1619); Sumiyo-mura (Sept. 23, 1954, Y. N., no. 1620). Kikai-shima Isl.: Kikai-machi (Oct. 8, 1954, S. K., no. 1621); Mt. Hyakuno-dai (Aug. 29, 1954, Y. N., no. 1622). Tokuno-shima Isl.: Isen-mura (Sept. 16, 1954, Y. N., no. 1623); Mt. Mikyo-dake (Sept. 17, 1954, Y. N., no. 1624).

66. **Puccinia Caricis-Boottianae** Hiratsuka, f. in Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 26, 1954.

Syn. *Aecidium nikkense* (non Hennings et Shirai) Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 88, 1952.

Hab. 0, I. On *Farfugium japonicum* Kitamura (*Tsuwabuki*). Oshima Isl.: Nase-shi (March, 1936 & March 6, 1937, T. T., nos. 1106 & 1234); Mikata-mura (Dec. 23, 1953, Y. N., no. 1232); Koniya-machi (Jan. 7, 1955, Y. M., no. 1616); Santaro-toge (Jan. 6, 1955, Y. M., no. 1617).

67. **Puccinia Chrysanthemi** Roze in Bull. Soc. Myc. Fr. XVII, p. 92, 1900. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 27, 1954).

Hab. II, III. On *Chrysanthemum morifolium* Ramat. (*Kiku*) (*cult.*). Oshima Isl.: Nase-shi (Oct., 1935, T. T., no. 1061).

68. **Puccinia citrina** Sydow, Monogr. Ured. I, p. 634 & pl. XXXVI, fig. 483, 1903.

Hab. II, III. On *Heterosmilax japonica* Kunth. (*Karasukiba-sankirai*). Oshima Isl.: Mikata-mura (Jan. 6, 1955, Y. N., no. 1684); Tatsugo-mura (Dec. 27, 1953, Y. N., no. 1685); Santaro-toge (Jan. 6, 1955, Y. M., no. 1686); Kasari-mura (Jan. 4, 1955, Y. M., no. 1687); Yamato-mura (Dec. 31, 1954 & Jan. 1, 1955, Y. M., nos. 1688 & 1689); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1691).

69. **Puccinia congesta** Berkeley et Broome in Jour. Linn. Soc. XI, p. 91, 1871. (Hiratsuka, f. in Jour. Jap. Bot. XIII, p. 598, 1937; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 28, 1954).

Hab. III. On *Ampelygonum umbellatum* Masamune (*Tsurusoba*). Oshima Isl.: Nase-shi (July 2, 1935, T. T., no. 807); Mikata-mura (July, 1936, T. T., no. 1127; Jan. 6, 1955, Y. N., no. 1615); Sumiyo-mura (Dec. 30, 1954, Y. N., no. 1614); Uken-mura (Dec. 30, 1954, Y. M., no. 1613).

70. **Puccinia Convolvuli** Castagne, Observ. Fl. Ured. I, p. 16, 1842.

Hab. II, III. On *Calystegia Soldanella* R. Br. (*Hama-hirugao*). Oshima Isl.: Kasari-mura (Aug. 25, 1954, Jan. 4, 1955, Y. M., nos. 1672 & 1673; Aug. 25, 1954, Y. N., no. 1674).

71. ***Puccinia Crepidis-integrae*** Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 61, 1952. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 28, 1954).

Hab. II, III. On *Crepidiastrum lanceolatum* Nakai (*Heranaren*). Oshima Isl.: Mikata-mura (Oct. 19, 1936, T. T., no. 1062); Yamato-mura (Jan. 1, 1955, Y. M., no. 1670).

72. ***Puccinia Crepidis-japonicae*** Dietel in Ann. Myc. VI, p. 226, 1908. (Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 62, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 29, 1954).

Hab. 0, I, II, III. On *Youngia japonica* DC. (*Oni-tabirako*). Oshima Isl.: Kasari-mura (Jan. 4 & 5, 1955, Y. M., nos. 1692 & 1693; Dec. 26, 1953, Y. N., no. 1185); Mikata-mura (Jan. 6, 1955, Y. N., no. 1694); Tatsugo-mura (Aug. 26, 1954, Y. N., no. 1695); Sumiyo-mura (Sept. 22, 1954, Y. N., no. 1696); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1697); Koniya-machi (Oct. 5, 1954, S. K., no. 1698); Chinzei-mura (Sept. 21, 1954, Y. N., no. 1699). Kikai-shima Isl.: Kikai-machi (Aug. 28, 1954, Y. N., no. 1700). Tokuno-shima Isl.: Isen-mura (Sept. 15, 1954, Y. N., no. 1701).

73. ***Puccinia Cynodontis*** Lacroix in Desm., Pl. Crypt. II, no. 655, 1859.

Hab. II, III. On *Cynodon Dactylon* Pers. (*Gyogishiba*). Oshima Isl.: Kasari-mura (Jan. 4, 1955, Y. M., no. 1878).

74. ***Puccinia Elytrariae*** Hennings in Hedwigia, XXXIV, p. 320, 1895.

Hab. III. On *Justicia procumbens* L. var. *riukiensis* Yamam. (*Kitsunenohimago*). Oshima Isl.: Mikata-mura (Jan. 6, 1955, Y. N., no. 1880). Tokuno-shima Isl.: Amagi-mura (Sept. 14, 1954, Y. N., no. 1879).

75. ***Puccinia erebia*** Sydow in Philippine Jour. Sci. VIII, Bot. p. 475, 1913. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 29, 1954).

Hab. II, III. On *Clerodendron inerme* Gaertn. (*Ibota-kusagi*). Oshima Isl.: Kasari-mura (Dec. 24, 1953, Y. N., no. 1174; Jan. 5, 1955, Y. M., no. 1829); Tatsugo-mura (Aug. 25, 1954, Y. N., no. 1830; Jan. 4, 1955, Y. M., no. 1831); Chinzei-mura (Sept. 21, 1954,

Y. N., no. 1832). Kikai-shima Isl.: Kikai-machi (Aug. 28, 1954, Y. N., no. 1833).

76. **Puccinia ferruginea** Léveillé in Vaillant, Voyage de la Bonite, Fungi, p. 204 & pl. 140, fig. 5, 1839/46. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 30, 1954).

Hab. III. On *Smilax China* L. (*Sarutori-ibara*). Oshima Isl.: Chinzei-mura (Oct., 1936, T. T., no. 1033).

77. **Puccinia flavipes** Sydow in Sydow & Butler in Ann. Myc. V, p. 497, 1907.

Hab. II, (III). On *Fimbristylis annua* Roem. et Schult. (*Tentsuki*). Oshima Isl.: Tatsugo-mura (Aug. 26, 1954, Y. N., no. 1828).

78. **Puccinia Glechomatis** De Candolle ex Poir. in Lam., Encycl. Bot. VIII, p. 245, 1808. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 31, 1954).

Hab. III. On *Glechoma hederacea* L. var. *grandis* Kudo (*Kakidoshi*). Oshima Isl.: Nase-shi (Nov., 1936, T. T., no. 1068).

79. **Puccinia Hemerocallidis** Thümen in Bull. Soc. Imp. Nat. Moscou, LV, p. 81, 1880. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 31, 1954).

Hab. II, III. On *Hemerocallis longituba* Miq. (*No-kwanzo*). Oshima Isl.: Nase-shi (Sept., 1935, T. T., no. 1058); Tatsugo-mura (Dec. 28, 1953, Y. N., no. 1191); Mikata-mura (Jan. 6, 1955, Y. N., no. 2024).

80. **Puccinia Hordei** Otth in Mitt. Nat. Ges. Bern (1870), p. 114, 1871. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 32, 1954).

Syn. *Puccinia anomala* Rostrup (Hiratsuka, f. in Bot. Mag. Tokyo, LIV, p. 375, 1940).

Hab. II, III. On *Hordeum sativum* Jess. var. *hexastichon* Hack. (*O-mugi*) (*cult.*). Oshima Isl.: Nase-shi (Dec. 10, 1929, T. T., no. 1099).

81. **Puccinia Lapsanae** Fuckel in Jahrb. Nass. Ver. Nat. XXIII/XXIV, p. 53, 1870. (Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 71, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 33, 1954).

Hab. II, III. On *Lapsana humilis* Mak. (*Yabutabirako*). Oshima Isl.: Nase-shi (Sept., 1935, T. T., no. 1160).

82. **Puccinia Lophatheri** (Syd.) Hiratsuka, f. in Jour. Jap. Bot. XIV, p. 36, 1938. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 34, 1954).

Hab. II, III. On *Lophatherum gracile* Brongn. (*Sasakusa*). Oshima Isl.: Tatsugo-mura (Dec. 28, 1953 & Aug. 26, 1954, Y. N., nos. 1181 & 1824); Sumiyo-mura (Sept. 21, 1954, Y. N., no. 1825). Tokuno-shima Isl.: Mt. Inokawa-dake (Sept. 19, 1954, Y. N., no. 1826); Mt. Mikyo-dake (Sept. 17, 1954, Y. N., no. 1827).

83. **Puccinia minussensis** Thümen in Bull. Soc. Imp. Nat. Moscou, LIII, p. 214, 1878. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 34, 1954).

Hab. (0, I), II, III. On *Lactuca indica* L. (*Aki-no-nogeshi*). Oshima Isl.: Mikata-mura (Oct. 20, 1936, T. T., no. 977); Koniya-machi (Jan. 7, 1955, Y. M., no. 1823).

84. **Puccinia Nanbuana** Hennings in Hedwigia, XL, p. (26), 1901. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 35, 1954).

Hab. II, III. On *Angelica kiusiana* Maxim. (*Oni-udo*). Oshima Isl.: China-mura (March, 1935, T. T., no. 1097).

85. **Puccinia Oenanthes-stoloniferae** Ito ex Tranzschel, Conspect. Ured. URSS, p. 299, 1939.

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86. **Puccinia Phyllostachydis** Kusano in Bull. Coll. Agric. Tokyo Imp. Univ. VIII, p. 2 & pl. VI, figs. 1, 2, 10 & 11, 1908.

Hab. II, III. On *Sinoarundinaria aurea* Honda (*Hotei-chiku*). Oshima Isl.: Tatsugo-mura (Dec. 28, 1953, Y. N., no. 1806).

87. **Puccinia Pogonatheri** Petch in Ann. Bot. Gard. Peradeniya, V, p. 235, 1912.

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88. **Puccinia Polygoni-amphibii** Persoon, Syn. Fung. p. 227, 1801. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 38, 1954).

Hab. II, III. On *Reynoutria japonica* Houtt. (*Itadori*). Oshima Isl.: Tatsugo-mura (Dec. 27, 1953, Y. N., no. 1189); Yamato-mura (Jan. 1, 1955, Y. M., no. 1795); Mikata-mura (Jan. 6, 1955,

Y. N., no. 1796); Nase-shi (Dec. 28, 1954, Y. M., no. 1797); Uken-mura (Dec. 30, 1954, Y. N., no. 1799); Koniya-machi (Oct. 5, 1954, S. K., no. 1800); Sumiyo-mura (Sept. 22, 1954, Y. N., no. 1801); Chinzei-mura (Sept. 22, 1954, Y. N., no. 1802).

89. **Puccinia rufipes** Dietel in Bot. Jahrb. XXXII, p. 48, 1902.

Hab. II, III. On *Imperata cylindrica* Beauv. var. *Koenigii* Durand et Schinz (*Chigaya*). Oshima Isl.: Kasari-mura (Dec., 1953, Y. N., no. 1803).

90. **Puccinia Scirpi-ternatani** Hiratsuka, f. in Transact. Sapporo Nat. Hist. Soc. XVII, p. 31, 1941. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agri. Univ. Ryukyus. I, p. 38, 1954).

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92. **Puccinia Smilacis-Sieboldii** Hiratsuka, f. in Bot. Mag. Tokyo, LVI, p. 377, 1942. (Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 81, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 39, 1954).

Hab. II, III. On *Smilax China* L. (*Sarutori-ibara*). Oshima Isl.: Nase-shi (Oct., 1936, T. T., no. 1034).

93. **Puccinia Stauntoniae** Tranzschel et Dietel in Dietel in Ann. Myc. XXVIII, p. 274, 1930.

Hab. III. On *Stauntonia hexaphylla* Decne. (*Mube*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1760).

94. **Puccinia tokyensis** Sydow, Monogr. Ured. I, p. 377, 1902.

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Hab. III. On *Hoya carnosa* R. Br. (*Sakura-ran*). Oshima Isl.: Nase-shi (Nov., 1935, T. T., no. 1124); Tatsugo-mura (Dec. 28, 1953, Y. N., no. 1190); Santaro-toge (Dec. 29, 1954, Y. M., no. 1756).

96. **Puccinia Wattiana** Barclay in Jour. Asiatic Soc. Bengal, LIX, pt. 2, p. 109, 1890. (Hiratsuka, f. in Mem. Facul. Agric. Tokyo Univ. Education, I, p. 83, 1952; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 40, 1954).

Hab. III. On *Clematis Meyeniana* Walp. (*Yanbaru-senninso*). Oshima Isl.: Kasari-mura (Dec. 24, 1953, Y. N., no. 1173; Jan. 4, 1955, Y. M., no. 1762); Santaro-toge (Dec. 29, 1954 & Jan. 6, 1955, Y. M., nos. 1763 & 1766); Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1767); Tatsugo-mura (Aug. 26, 1954, Y. N., no. 2026). Tokunoshima Isl.: Amagi-mura (Sept. 14, 1954, Y. N., no. 2027).

97. **Puccinia Zoysiae** Dietel in Bot. Jahrb. XXXII, p. 48, 1902.

Hab. 0, I. On *Paederia chinensis* Hance. (*Yaitobana*). Oshima Isl.: Kasari-mura (Jan. 5, 1955, Y. M., no. 2028); Mikata-mura (Oct. 4, 1954, S. K., no. 1754). Kikai-shima Isl.: Kikai-machi (Oct. 8, 1954, S. K., no. 1755).

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100. **Aecidium foetidum** Dietel in Bot. Jahrb. XXVIII, p. 289, 1901. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 42, 1954).

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Hab. On *Machilus Thunbergii* Sieb. et Zucc. (*Tabu-no-ki*). Oshima Isl.: Kasari-mura (Dec. 24, 1953, Y. N., no. 1180). Kikai-shima Isl.: Mt. Hyakuno-dai (Aug. 29, 1954, Y. N., no. 2029). Tokunoshima Isl.: Mt. Inokawa-dake (Sept. 19, 1954, Y. N., no. 2030).

103. **Aecidium Phyllanthi** Hennings in Bot. Jahrb. XV, p. 6, 1892. (Hiratsuka, f. in Jour. Jap. Bot. XIV, p. 38, 1938; Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 43, 1954).

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104. **Uredo Alocasiae** Sydow, Monogr. Ured. IV, p. 521, 1924.

Hab. On *Alocasia macrorhiza* Schott. (*Kuwadzuimo*). Oshima Isl.: Mt. Yuwan-dake (Jan. 1, 1955, Y. N., no. 1785).

105. **Uredo Dianellae** Dietel in Hedwigia, XXXVII, p. 213, 1898.

Hab. On *Dianella ensifolia* Red. (*Kikyoran*). Oshima Isl.: Mt. Yuwan-dake (Dec. 31, 1954, Y. M., no. 1750; Jan. 1, 1955, Y. N., no. 1787); Tatsugo-mura (Dec. 28, 1953 & Aug. 25, 1954, Y. N., nos. 1751 & 1752); Santaro-toge (Dec. 29, 1954, Y. M., no. 1753).

106. **Uredo Lasianthi** Sydow in Sydow & Petrak in Ann. Myc. XXIX, p. 182, 1931. (Hiratsuka, f. & Shimabukuro in Sci. Bull. Facul. Agric. Univ. Ryukyus. I, p. 44, 1954).

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107. **Uredo paspalina** Sydow in Ann. Myc. XV, p. 177, 1917.

Hab. On *Paspalum scrobiculatum* L. (*Suzume-no-kobie*). Oshima Isl.: Kasari-mura (Jan. 4, 1955, Y. M., no. 1877).

108. **Uredo Sawadae** Ito in Ito & Otani in Bot. & Zool. IX, p. 662, 1941 (nom. seminud.); Ito & Murayama in Transact. Sapporo Nat. Hist. Soc. XVII, p. 171, 1943.

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