

**Yasuji MORIMOTO\*: Notes on the rust fungi collected  
from Amami-Ohshima**

森本 泰二：奄美大島の銹菌について  
(With Pl. I-II)

The report on the rust-fungi occurring in this district has been published by N. Hiratsuka and S. Shimabukuro in their paper entitled "Uredinales of the Ryukyu Islands" in 1954. Among the total 159 species, 33 species collected from Ohshima were described in it.

The writer had an opportunity of making collections in the Amami-ohshima from December 28, 1954 to January 7, 1955, and collected 60 species of rust-fungi there. In this paper 48 species were reported, omitting 12 species which were already recorded from Amami-Ohshima.

The writer wishes to express his heartiest thanks to Professor Naohide Hiratsuka, Tokyo University of Education, for his kind help and he is also indebted to Professor Sumihiko Hatsushima, Faculty of Agriculture of Kagoshima University for identification of host plants of the fungi, and to Mr. Tadayoshi Morita, teacher of biology of Ohshima High School, for accompanying him to make a survey of the whole course.

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Melampsoraceae

1. *Uredinopsis macrosperma* Magnus  
Hab. II. On *Pteridium aquilinum* var. *japonicum*. (warabi).
2. *Milesina microspora* Hiratsuka, f.  
Hab. II. On *Dryopteris acuminata* (*Cyclosorus acuminatus*) (hoshida).
3. *Milesina exigua* Faull.  
Hab. II. On *Microlepia strigosa* (ishi-kaguma).
4. *Milesina Hiratsukai* Y. Morimoto. in Journ. Jap. Bot. **28** (10): 313, 1953.  
Hab. II. On *Plagiogyria japonica* (kijino-o-shida). Mt. Yuwan-dake (Dec. 31, 1954).

This species was reported by the writer from the materials collected in Yaku-

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shima, 1951, and he also identified the fungi on the same host collected from both Okuyamaji July, 1, 1942 and Nakamura-cho, July, 1, 1942 (Hata-gun, Tosa, Shikoku) as *Milesina Hiratsukai*. So it is clear that *Milesina Hiratsukai* Y. Morimoto is widely distributed from Tosa to Yakushima and Amami-Oshima.

5. *Hyalopsora Polypodii* (Diet.) Magnus.  
Hab. II. On *Blechnopsis orientalis* (hiryu-shida).
6. *Hyalopsora hakodatensis* Hiratsuka, f.  
Hab. II. On *Diplazium maximum* (hiroha-nokogirishida).
7. *Pucciniastrum Actinidiae* Hiratsuka, f.  
Hab. II. On *Actinidia rufa* (nashikazura).
8. *Pucciniastrum Agrimoniae* (Diet.) Tranzschel.  
Hab. II. On *Agrimonia pilosa* var. *japonica* (kinmizuhiki).
9. *Pucciniastrum hikosanense* Hiratsuka, f.  
Hab. II. On *Acer insulatre* (shima-urikaede) New host!  
This materials have longer uredospores  $17.0-40.8 \times 14.3-22.1 \mu$  than the original description, but he thinks it is better to treat it as above species.
10. *Pucciniastrum Potentillae* Komarov.  
Hab. II. On *Potentilla Freyniana* (mitsuba-tsuchigiri).
11. *Melampsora Idesiae* Miyabe ex Hirats.  
Hab. II. On *Cathayea polycarpa* (iigiri).
12. *Melampsora yoshinagai* Hennings.  
Hab. II. On *Wikstroemia phymatoglossa* Koidz. (ohshima-gampi). New host!
13. *Phakopsora Ampelopsidis* Dietel et Sydow.  
Hab. II. On *Ampelopsidis brevipedunculata* var. (no-budo).
14. *Phakopsora Fici-erectae* Ito et Otani.  
Hab. II. On *Ficus erecta* (inu-biwa).
15. *Phakopsora incompleta* (Syd.) Cummins.  
Hab. II. On *Microstegium ciliatum* (oh-sasagaya).
16. *Phakopsora Mallotti* Cummins.  
Hab. II. On *Mallotus japonicus* (akamegashiwa).
17. *Crossopsora Antidesmae-dioicae* (Syd.) Arthur et Cummins.  
Hab. II. On *Antidesma japonicum* (yama hihatsu).
18. *Coleosporium Bletiae* Dietel.  
Hab. II. On *Calanthe discolor* (cbine).
19. *Coleosporium Capanulae* Léveillé.

- Hab. II, III. On *Adenophora tripyllus* var. *tetraphylla* (tsuri-gane-ninzin).  
 Hab. II. On *Adenophora verticillata* var. *triphylla* (saiyo-shajin).
20. *Coleosporium Carpesii* Saccardo.  
 Hab. II. On *Carpesium divaricatum* (gankubiso).  
 Hab. II. On *Carpesium* sp.
21. *Coleosporium Clematidis* Barclay.  
 Hab. II. On *Clematis paniculata* (senninso).
22. *Coleosporium Clerodendri* Dietel.  
 Hab. II. On *Clerodendron trichotomum* (kusagi).
23. *Coleosporium Paederiae* Dietel.  
 Hab. II. On *Paederia chinensis* (yaito-bana).
24. *Coleosporium Tylophorae* Y. Morimoto. nov. spec.  
 Soris uredosporiferis hypophyllis, minutis, rotundatis, sparsis, flavidis; uredosporis globosis vel subglobosis,  $23.8-42.5 \times 17.0-25.5 \mu$ , episporio  $2-3.4 \mu$ , incolorato verrucoso praeditae. Teleutosori ignostis.  
 Hab. II. On *Tylophora japonica* Miq. (tokiwa-kamomezuru).  
 Santaro-toge, (Jan, 6, 1955.); Y. Morimoto. Type! He has not yet found its teleutostage, but treats it as *Coleosporium* from the character of uredospores and uredosorus.

## Pucciniaceae

25. *Kuehneola Callicarpae* Sydow.  
 Hab. II, III. On *Callicarpa japonica* var. *luxurians* Rehd. (o-murasaki-snikibu).  
 Hab. II, III. On *Callicarpa mollis* (yabumurasaki).  
 Hab. II, III. On *Callicarpa ohshimaensis* Hayata. (ohshima-murasaki) New-host!
26. *Hamaspora Rubi-Sieboldii* (Kawagoe) Dietel.  
 Hab. II. On *Rubus Sieboldii* (horoku-ichigo).
27. *Phragmidium Rosae-multiflorae* Dietel.  
 Hab. II, III. On *Rosa polyantha* (noibara).
28. *Phragmidium pauciloculare* (Diet.) Sydow.  
 Hab. II. On *Rubus parvifolius* var. *triphyllus* (nawashigo-ichigo).
29. *Uromyces linearis* Berkeley et Broome.  
 Hab. II. On *Panicum repens* (haikibi).
30. *Uromyces tenuicutis* Mc Alpine.  
 Hab. II. On *Sporobolus indicus* (nezumino-o).

31. *Puccinia Caricis-Bootianae* Hiratsuka, f.  
Hab. 0, I. On *Farfugium japonicum* (tsuwa-buki).
32. *Puccinia Convolvuli* Castagne.  
Hab. II. On *Calystegia Soldanella* (hama-hirugao).
33. *Puccinia Cynodontis* Lacroix.  
Hab. II. On *Cynodon Dactylon* (gyogi-shiba).
34. *Puccinia ferruginea* Léveillé in S. Ito, Mycological flora of Japan, **3**, 1950.  
Hab. II, III. On *Heterosmilax japonica* Kunth (karasukiba-sankirai)  
Status teleutosporiferis.  
Soris uredosporiferis hypophyllis, sparsis vel aggregatis, rotundatis vel ellipsoides  
0.3-1 mm. diam., epidermide primo tecti, tanden dehiscentibus, pulvinatis, flavo-  
brunneis; uredospori subglobois vel ellipsoides,  $42.5-76.5 \times 27.2-37.4 \mu$  echinulatis,  
apice 8.5-17  $\mu$ . Mt. Yuwan-dake, (Dec. 31.); Naon, (Dec. 31.); Toen, (Dec. 31.);  
Yamato-mura, (Jan. 1.); Yoan, (Jan. 4.) Santaro-toge, (Jan. 6.).
35. *Puccinia Hemerocallidis* Thümen.  
Hab. II. On *Hemerocallis* sp.
36. *Puccinia levis* (Sacc. et Bizz.) Magnus.  
Hab. II. On *Syntherisma sanguinalis* var. *ciliaris* (meishiba).
37. *Puccinia Lophatheri* (Syd.) Hiratsuka, f.  
Hab. II, III. On *Lopatherum gracile* (sasakusa).
38. *Puccinia Crepidis-integrae* Hiratsuka, f.  
Hab. II. On *Lactuca laneolata* (hosoba-wadan).
39. *Puccinia Phyllostachydis* Kusano.  
Hab. II. On *Phyllostachys bambusoides* (madake).
40. *Puccinia Polygoni-amphibi* Persoon.  
Hab. II. On *Reynoutria japonica* (itadori).
41. *Puccinia Smilacis-Sieboldii* Hiratsuka, f.  
Hab. II. On *Smilax nervo-marginata* (sasaba-sankirai).
42. *Puccinia tokyensis* Sydow.  
Hab. II. On *Cryptotaenia japonica* (mitsuba-zero).
43. *Puccinia Zoysiae* Dietel.  
Hab. I. On *Paederia chinensis* (hekuso-kazura).

## Uredinales Imperfecti

44. **Uredo amami-ohshimaensis** Y. Morimoto. nov. spec.

Soris uredosporiferis, hypophyllis, rarius epiphyllis sparsis, minutis vel longis 0.5-1 mm, (2 mm), cinnabaris, primo epidermide tectis, dein undis, pulverulentis. Uredosporis globosis vel subglobosis echinulatis  $25.5-56.1 \times 13.6-35.7 \mu$ , episporio  $1.7-3.4 \mu$  crasso, hyalinis.

Hab. On *Ligustrum ovalifolium* (ohba-ibota).

Akaogi, (Jan. 4, 1955.) Y. Morimoto. Type! Kasari-mura, (Jan. 5).

45. *Uredo Dianella* Dietel.

Hab. On *Dianella ensifolia* (kikyo-ran).

46. **Uredo Morindae** Y. Morimoto nov. spec.

Soris uredosporiferis hypophyllis, sparsis vel aggregatis, primo epidermide tectis, dein nudis, pulverulentis, flavidis, 0.3-0.7 mm. Uredosporis globosis vel subglobosis, echinulatis,  $24-36.3 \times 18-27.5 \mu$ , episporio  $1 \mu$  crasso.

Hab. On *Morinda umbellata* Linn. (hanagasa-no-ki).

Santaro-toge (Jan. 6, 1955.) Y. Morimoto. Type!

47. *Uredo paspalina* Sydow.

Hab. On *Paspalum scrobiculatum* (suzumeno-kobie).

48. **Uredo yuwandakensis** Y. Morimoto nov. spec.

Soris uredosporiferis hypophyllia, sparsis vel aggregatis, primo epidermide tectis, dein nudis, pulverulentis, flavidis 0.3-0.5 mm. Uredosporis globosis subglobosis vel ellipsoides echinulatis  $25.5-42.5 \times 13.6-30.6 \mu$ , crasso.

Hab. On *Smilax biflora* (hime-kakara).

Mt. Yuwan-dake, (Dec. 31, 1954.) Y. Morimoto. Type!

### Summary

1. 4 species new to science: *Coleosporium Tylophorae* Y. Morimoto. *Uredo amami-ohshimaensis* Y. Morimoto. *Uredo Morindae* Y. Morimoto. *Uredo yuwandakensis* Y. Morimoto.
2. Uredosorus of *Puccinia ferruginea* is newly described.
3. New hosts to Japanese Uredinales: *Acer insulatre* Makino (shima-urikaede). *Wikstroemia phymatoglossa* Koidz. (ohshimagampi). *Callicarpa ohshimaensis* Hayata (ohshima-murasaki).

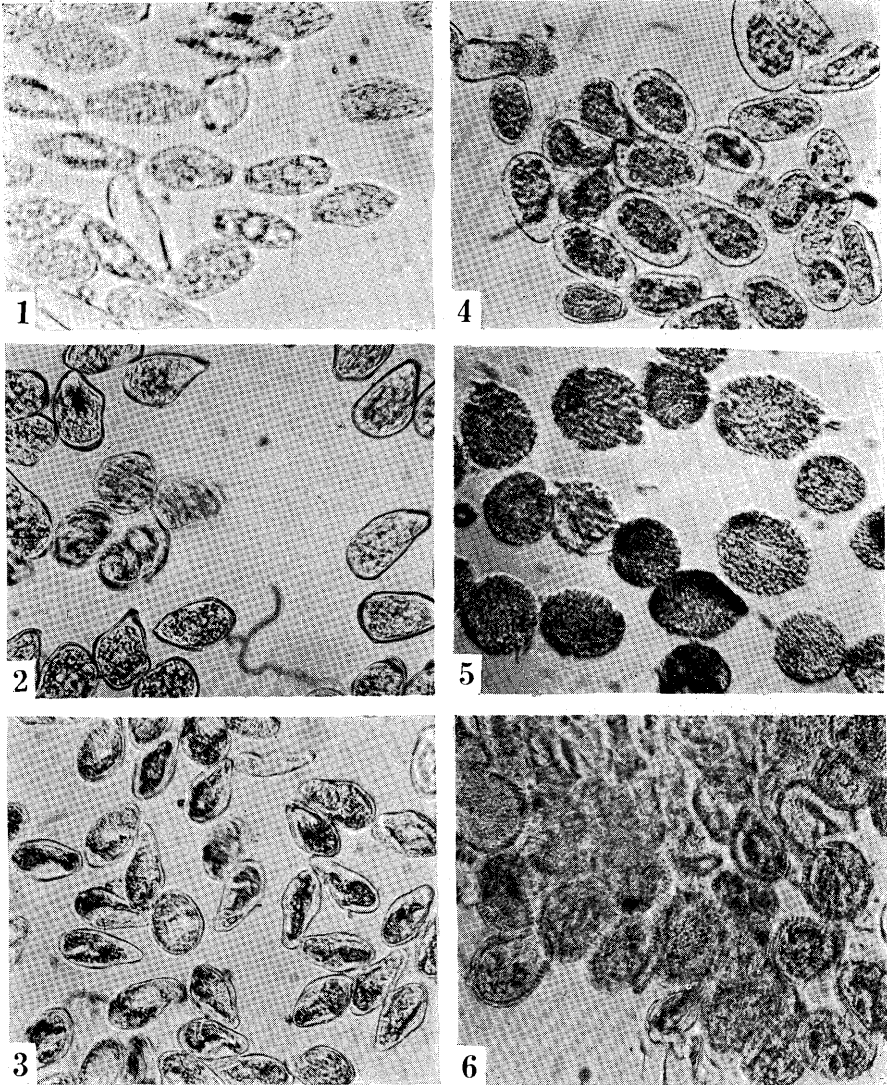
Uredospores  $\times 420$ .

Fig. 1. *Uredinopsis macrosperma* Mag. on *Pteridium aquilinum* var. *japonicum*

Fig. 2. *Hyalopsora Polypodii* (Diet.) Magnus on *Blechnopsis orientalis*

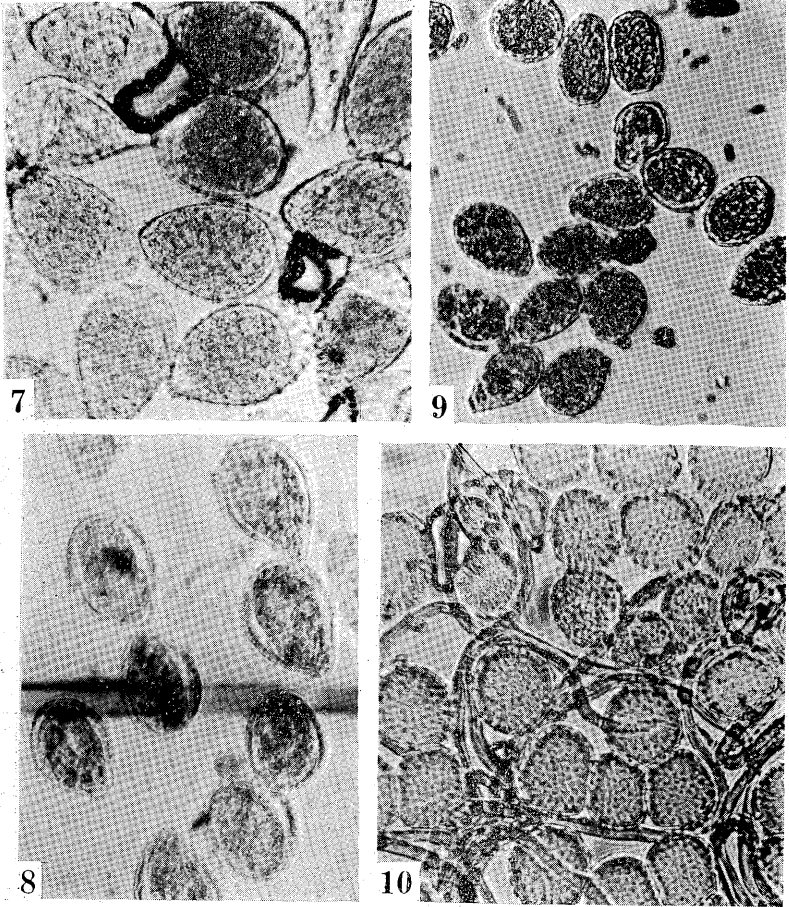
Fig. 3. *Hyalopsora hakodatensis* Hirats. f. on *Diplazium maximum*

Fig. 4. *Pucciniastrum hikosanense* H. f. on *Acer insulare*

Fig. 5. *Coleosporium Bletiae* Dietel on *Calanthe discolor*

Fig. 6. *Coleosporium Tylophorae* Y. Morimoto on *Tylophora japonica*

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Uredospores  $\times 420$ .

- Fig. 7. *Puccinia ferruginea* Lév. on *Heterosmilax japonica*  
 Fig. 8. *Uredo amami-ohshimaensis* Y. Morimoto on *Ligustrum ovalifolium*  
 Fig. 9. *Uredo yuwanjakensis* Y. Morimoto on *Smilax biflora*  
 Fig. 10. *Hamaspora Rubi-Sieboldii* Dietel on *Rubus Sieboldii*

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