

# MATERIALS FOR THE FLORA OF SHIKOKU.....XI.

Yoshiyuki AKASAWA

(Received January 31, 1964)

## POLYPODIACEAE

ウラボシ科

### Colysis PRESL

イワヒトデ属

- Colysis elliptica* (THUNBERG) CHING in Bull. Fan. Mem. Inst. Biol. IV. 333 (1933), *pro parte*. H. ITO in Journ. Jap. Bot. XI. 89 (1935), in Bot. Mag. Tokyo, XLIX. 488 (1935), Fil. Jap. III. f. 413 (1944). HONDA, Nom. Pl. Jap. 9 (1939), ed. emend. 17 (1957). TAGAWA in Acta Phytotax. Geobot. XV. 64 (1953), Colour. III. Jap. Pterid. 163 et 190 Pl. 70 fig. 380 (1959). OHWI, Fl. Jap. Pterid. 155 (1957). COPELAND, Fern Fl. Philipp. III. 491 (1960).
- Polypodium ellipticum* THUNBERG, Fl. Jap. 335 (1784). MATSUMURA, Ind. Pl. Jap. I. 333 (1904). MATSUMURA et HAYATA, Enum. Pl. Formos. 629 (1906), *pro parte*. MORI, Enum. Pl. Cor. 14 (1922). HANDEL-MAZZETTI, Symb. Sinic. VI. 45 (1929). MAKINO, III. Fl. Nipp. 919 f. 2755 (1940).
- Gymnogramme elliptica* (THUNBERG) BAKER, ex FRANCHET et SAVATIER, Enum. Pl. Jap. II. 248 (1879), (*non* HOOK et BAKER). MAKINO in Bot. Mag. Tokyo, XII. 166 (1898). YABE in Bot. Mag. Tokyo, XVI. 51 (1902).
- Selliguea coraiensis* CHRIST in Fedde Repert. V. 11 (1908), Bull. Acad. Géogr. Bot. 178 (1909).
- Polypodium ellipticum* THUNBERG *var. typicum* MAKINO in Bot. Mag. Tokyo, XXIII. 72 (1909). MASAMUNE, Prel. Rep. Veg. Yak. 30 (1929), Fl. Geobot. Yakusima 92 (1934). MAKINO et NEMOTO, Fl. Jap. ed. 2. 86 (1931).
- Polypodium faurianum* NAKAI, Fl. Kor. II. 416 (1911). CHING in Bull. Fam. Mem. Inst. Biol. II. 18 (1931). TAGAWA in Acta Phytotax. Geobot. I. 107 (1932).
- Polypodium neoellipticum* KOIDZUMI in Bot. Mag. Tokyo, XLIII. 388 (1929).
- Polypodium ellipticum* THUNBERG *f. brevis* WU, Polyp. Yaosan in Bull. Dept. Biol. Sun. Yatsen. Univ. n. 3. 152 (1932).
- Colysis elliptica* (THUNBERG) CHING *var. elliptica* ex AKASAWA in Rep. Usa Marine Biol. Stat. IV-5. 24 (1957).
- Nom. Jap. *Iwahitode*.
- Hab. Prov. Tosa : Arakura-Zinsya, Hirose, Okinosima (Y. AKASAWA! Aug. 28, 1953. no. 107674. 107675). Okinosima (M. TAGAWA! Aug. 2, 1943-K). Kurogonotaki, Higashiyama-mura (Y. AKASAWA! Aug. 18, 1952. no. 104253). The Kusunokawa-yama state forest, near Kure, Takaoka-gun (M. TAGAWA! Sept. 1, 1939-K). Near the Tarunotaki-falls, Kamibun-mura, Takaoka-gun (M. TAGAWA! Aug. 22, 1939-K). Hōnokawa, Takaoka-gun (Y. AKASAWA!

Oct. 1, 1935. no. 925. no. 927). Sinzaike, Usa-cho (Y. AKASAWA! Apr. 10, 1955). Seiryuji, Ryuzaki, Usa-cho (Y. AKASAWA! Nov. 20 1954. no. 762). Tosayama-mura (Y. AKASAWA! Jan. 24, 1954. no. 110292). Nanatsubuchi (Y. AKASAWA! Oct. 7, 1951. nos. 100510-12). Soanji, Kochi-city (Y. AKASAWA! Nov. 10, 1953. no. 110189). Mt. Kashio-yama, Kochi-city (Y. AKASAWA! Mar. 6, 1953. no. 104108). Mt. Washio-yama, Kochi-city (Y. AKASAWA! Dec. 4, 1951. no. 100874). Bisyamon-no-taki, Okô-mura (Y. AKASAWA! Sept. 27, 1953. no. 109173). Kamagadani, Nakayama-mura, Aki-gun (M. TAGAWA! Aug. 22, 1930-K). Iyagadani, Aki-city (Y. AKASAWA! Jun. 15, 1958. no. 58-11). Nisidera, Muroto-cho (Y. AKASAWA! Nov. 20, 1955. no. 33429). Iruki, Sakinohama-cho (Y. AKASAWA! Nov. 21, 1955. no. 33492). Kawachi-jinsya, Narukawa, None-cho (Y. AKASAWA! Nov. 22, 1955. no. 33358.). Kannoura-cho (Y. AKASAWA! Nov. 23, 1955. no. 33553). Prov. Awa: Nijyunotaki, Todoroki, Kaihu-gun (Y. AKASAWA! Aug. 12, 1946). Dekubo-dani, Shishikui-cho (Y. AKASAWA! Aug. 4, 1962. no. 62-A-360).

Distr. Honsyu, Kyusyu, Ryukyu, Formosa, Bonin, Korea (Quelpaert), China, Philippines, Indo-china et India.

*Colysis pothifolia* (HAMILTON ex DON) PRESL, Epim. Bot. 148 (1849). H. ITO in Journ. Jap. Bot. XI. 89 (1935) *ut* *C. pothifolia* H. ITO. Fil. Jap. III. f. 414 (1944). HONDA, Nom. Pl. Jap. 9 (1939), ed. emend. 18 (1957). TAGAWA in Acta Phytotax. Geobot. XV. 64 (1953), Colour. Ill. Jap. Pterid. 163 et 190 Pl. 70 fig. 379 (1959). OHWI, Fl. Jap. Pterid. 155 (1957).

*Hemionitis pothifolia* HAMILT ex DON, Prod. Fl. Nepal. 13 (1825).

*Gymnogramme pothifolia* (HAMILT) SPR., Syst. Veg. IV. 39 (1827). MAKINO in Bot. Mag. Tokyo, XII. 166 (1898).

*Selliguea pothifolia* (HAMILT) J. SM. in Journ. Bot. III. 399 (1841), Ferns Brit. Foreign. 97 (1876).

*Polypodium pothifolia* (HAMJLT) METT., Far. Bot. Gart. Leip. 130 t. 25 f. 21 (1856).

*Polypodium ellipticum* (non THUNB.) CHR. Farnk. Erd. 107 (1897). DIELS in ENGL. & PRANTL. Nat. Pfl.-fam. I-4. 318 (1899). MATSUMURA, Ind. Pl. Jap. I. 333 (1904), *pro parte*. MATSUM. et HAY., Enum. Pl. Formos. 629 (1906), *pro parte*. CHING in Bull. Fan. Mem. Inst. Biol. II. 20 (1931), *pro parte*.

*Polypodium ellipticum* THUNB. *var. pothifolium* (HAMILT) MAKINO in Bot. Mag. Tokyo, XXIII. 72 (1909). MASAMUNE, Prel. Rep. Veg. Yak. 30 (1929), Fl. Geobot. Yakusima 91 (1934). MAKINO et NEMOTO, Fl. Jap. ed. 2. 86 (1931).

*Polypodium flavescens* CHING in Bull. Fan. Mem. Inst. Biol. II. 22 Pl. 8 (1931). TAGAWA in Acta Phytotax. Geobot. I. 107 (1932).

*Colysis elliptica* (THUNB.) CHING *var. pothifolia* (HAMILT) CHING, Bull. Fan. Mem. Inst. Biol. IV. 334 (1933). H. ITO in Bot. Mag. Tokyo, XLIX. 488 (1935). AKASAWA in Rep. Usa Marine Biol. Stat. IV. 24 (1957).

*Colysis pothifolia* (HAMILT) PRESL *var. membranacea* NAKAI in Bull. Nat. Sci. Mus. Tokyo, no. 27. 23 (1949).

- Nom. Jap. Ô-iwahitode, Oho-iwahitode.  
 Hab. Prov. Tosa : Okinosima (TAGAWA! Jul. 19, 1931-K). Hiyoshi-zinzya, Mosima, Okinosima (Y. AKASAWA! Jul. 22, 1953. no. 107612). Mosima, Okinosima (Y. AKASAWA! Mar. 31, 1958. no. 1049). Koyano, Okinosima (Y. AKASAWA! Jul. 28, 1953. no. 107647). *ibid.* (Y. AKASAWA! Mar. 31, 1958. nos. 58-1045. 1046). Asizuri, Kiyomatsu-mura, Hata-gun (G. KOIDZUMI! Aug. 17, 1934-K). Asizuri-yama (Y. AKASAWA! Dec. 12, 1955. nos. 33628-37). Hakusan, Asizuri-misaki (Y. AKASAWA! Aug. 1, 1951. no. 107998). Tengu-kokuyûrin, Asizuri-misaki (Y. AKASAWA! Aug. 21, 1952. no. 102503). Tsurô, Muroto-misaki (T. YAMAWAKI! Feb. 29, 1944-K). None-cho, Aki-gun (T. YAMAWAKI! Mar. 22, 1943-K).  
 Prov. Iyo : Nakadama, Higashisotoumi-mura, Minami-uwa-gun (M. OGATA! Aug. 30, 1922-K).  
 Distr. Honsyu, Kyusyu, Ryukyu, Formosa, Bonin, Philippines, China, Nepal, Sikkin-Himalaya & Indochina.

### Crypsinus PRÉSL

ミツデウラボシ属

- Crypsinus engleri** (LUERSSSEN) COPELAND, Gen. Fil. 206 (1947). TAGAWA in Acta Phytotax. Geobot. XV. 142 (1954), Colour. Ill. Jap. Pterid. 164 et 192 Pl. 70 fig. 381 (1959). HONDA, Nom. Pl. Jap. ed. emend. 18 (1957). OHWI, Fl. Jap. Pterid. 157 (1957).  
*Polypodium engleri* LUESSEN in ENGL. Bot. Jahrb. IV. 361 (1883). BAKER in Ann. Bot. V. 478 (1891). MAKINO, Phaner. Pterid. Jap. Icon. I. t. 29 (1899), Ill. Fl. Nipp. 917 f. 2749 (1940). MATSUM., Ind. Pl. Jap. I. 392 (1904). TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 301 (1915). MORI, Enum. Pl. Cor. 15 (1922). OGATA, Icon. Fil. Jap. I. Pl. 38 (1928). MAKINO et NEMOTO, Fl. Jap. ed. 2. 86 (1931). MASAMUNE, Prel. Rep. Veg. Yak. 30 (1929), Fl. Geobot. Yakusima 92 (1934).  
*Polypodium sp.* ex Y. YOSHINAGA in Bot. Mag. Tokyo, III. 66 (1889).  
*Polypodium hastatum* THUNB. var. *engleri* (LUERSS.) CHRIST, Bull. Herb. Boiss. VI. 875 (1898), *excl. pl.*  
*Phymatodes engleri* (LUERSS.) CHING, Contr. Inst. Bot. Nat. Acad. Peiping II. 72 (1933).  
*Phymatopsis engleri* (LUERSS.) H. ITO in Journ. Jap. Bot. XI. 98 (1935), Fil. Jap. Ill. f. 387 (1944). HONDA, Nom. Pl. Jap. 19 (1939).  
 Nom. Jap. *Takanoha-urabosi*  
 Hab. Prov. Tosa : The state forest of Honokawayama, Kamibun-mura, Takaoka-gun (M. TAGAWA! Aug. 24, 1939-K). Hoonokawa, Takaoka-gun (Y. AKASAWA! Oct. 1, 1935. no. 875). Daiichi-huchi, Nanatsubuchi (Y. AKASAWA! Apr. 19, 1953. no. 104662). Daisan-huchi, Nanatsubuchi (Y. AKASAWA! Apr. 19, 1953. no. 104671). Tosayama-mura (Y. AKASAWA! Jan. 24, 1954. no. 110274). Hata-mura, Tosa-gun (Y. AKASAWA! Oct. 17, 1935. no. 1119). Namura, Ichi-mura, Aki-gun (M. TAGAWA! Aug. 6, 1930-K).

Prov. Awa; Todoroki-no-taki, Kaihu-gun (Y. AKASAWA! Aug. 14, 1961. no. 100).

Distr. Honsyu, Kyusyu, Korea (Quelpaert), Formosa.

**Crypsinus hastatus** (THUNBERG) COPELAND, Gen. Fil. 206 (1947), Fern Fl. Philipp. III. 505 (1960). TAGAWA in Acta Phytotax. Geobot. XV. 142 (1954), Colour. III. Jap. Pterid. 164 et 192 Pl. 70 fig. 383 (1959). HONDA, Nom. Pl. Jap. ed. emend. 18 (1957). OHWI, Fl. Jap. Pterid. 157 (1957).

*Polypodium hastatum* THUNBERG, Fl. Jap. 335 (1784), Ic. Pl. Jap. t. 10 (1801). HOOK., Sp. Fil. V. 74 (1864). METT. in Ann. Mus. Lugd. Bat. II. 227 (1866). MIQUEL in Ann. Mus. Lugd. Bat. III. 171 (1867). HOOK. & BAK., Syn. Fil. 361 (1868). FR. et SAV., Enum. Pl. Jap. II. 247 (1876). MAXIM., Fl. As. Or. Fragm. 73 (1879). BAK. in Journ. Bot. XXIII. 106 (1885). HENRY, List Pl. Formos. 115 (1896). Chr. in Bull. Herb. Boiss. IV. 673 (1896), Farnk. Erd. 109 (1897), WARB. Mons. I. 62 (1900). MAKINO, Phan. Pter. Ic. Jap. I. pl. 28 (1899). III. Fl. Nipp. 917 f. 2748 (1940). DIELS in ENGL. Bot. Jahrb. XXIX. 205 (1900). HEMSL. in Journ. Linn. Soc. Bot. XXXV. 20 (1902). MATSUMURA, Ind. Pl. Jap. I. 334 (1904). MATSUM. et HAY., Enum. Pl. Formos. 631 (1906). NAKAI, Fl. Korea. II. 415 (1911). TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 300 (1915). OGATA, Ic. Fil. Jap. I. Pl. 39 (1928). MASAMUNE, Prel. Rep. Veg. Yak. 31 (1929), Fl. Geobot. Yakusima 93 (1934). MAKINO et NEMOTO, Fl. Jap. ed. 2. 88 (1931). MIYABE et KDDO, Fl. Hokk. & Sagh. I. 40 (1930).

*Pleopeltis hastata* (THUNBERG) MOORE, Ind. Fil. 346 (1862). HARA in Journ. Jap. Bot. IX. 185 (1933).

*Phymatodes hastatus* (THUNBERG) CHING, Sinensis III. 344 (1933), Contr. Inst. Biol. Nat. Acad. Peiping II. 73 (1933).

*Phymatopsis hastata* (THUNB.) KITAGAWA ex H. ITO in Journ. Jap. Bot. XI. 99 (1935), Fil. Jap. III. f. 385 (1944). HONDA, Nom. Pl. Jap. 19 (1939).

**Crypsinus hastatus** (THUNBERG) COPELAND form. **hastatus**

Nom. Jap. *Mitude-urabosi*, *Mitsude-uraboshi*.

Hab. Prov. Tosa: Inter Moshima et Koyano, Okino-sima (Y. AKASAWA! Mar. 31, 1958. no. 58-959). Koyano, Okino-sima (Y. AKASAWA! Mar. 31, 1958. nos. 58-983. 58-100). Okinosima (M. TAGAWA! Jul. 21, 1931-K). Kasima, Shimizu-city (Y. AKASAWA! Aug. 9, 1956). Kuroson, Hata-gun (Y. AKASAWA! Aug. 7, 1956). Gobetsuto, Yusuhara-mura (Y. AKASAWA! Aug. 2, 1955. no. 31932). Ryu, Usa (Y. AKASAWA! Nov. 20, 1954. no. 825). Kōtani, Kōtani-mura (Y. AKASAWA! MAY. 29, 1955. no. 32839). Asakura-jinsya, Kochi-city (Y. AKASAWA! Nov. 10, 1953. no. 109974). Soanji, Kochi-city (Y. AKASAWA! Nov. 10, 1953. no. 109985). Atago-jinsya, Kochi-city (Y. AKASAWA! Dec. 14, 1952. no. 103559). Nanatsubuchi (Y. AKASAWA! Oct. 7, 1951. no. 100506). Hata, Kochi-city (Y. AKASAWA! May. 3, 1951. no. 105151). Kureno, Kochi-city (Y. AKASAWA! Apr. 29, 1958. no. 58-745). Watarizu, Motoyama-cho (Y. AKASAWA! Jul. 24, 1957). Kuriyama,

Tochi-mura, Nagaoka-gun (Y. AKASAWA! Mar. 8, 1953). Niida-jinsya, Ootani, Nishikawa-mura, Kami-gun (Y. AKASAWA! Dec. 21, 1952. no. 103470). Iyaga-dani, Aki-city (Y. AKASAWA! Jun. 15, 1958. no. 58-135). Hachiman-jinsya, Aki-city (Y. AKASAWA! Jun. 15, 1958. no. 58-82). Ioki, Aki-gun (Y. AKASAWA! Apr. 4, 1953. no. 104412). *ibid.* (Y. AKASAWA! Nov. 20, 1955. no. 33405). *ibid.* (G. KOIDZUMI! Sept. 1, 1934-K). Namura, Ioki-mura (M. TAGAWA! Aug. 6, 1930-K). Simo-okawa, Aki-gun (M. TAGAWA! Aug. 18, 1955. no. 32319).

Prov. Awa : Kirino, En route from Kirino to mt. Miyotai-san (Y. AKASAWA! Aug. 1, 1963. no. 63-A-899. 900). Kirihata-ji, Kirihata-cho, Awa-gun (Y. AKASAWA! Aug. 5, 1939. no. 4776). Ōasa-jinsya, Banzai-cho, Itano-gun (Y. AKASAWA! Aug. 13, 1939. no. 4800-2). Tosadamari, Ōogejima, Itano-gun (Y. AKASAWA! Nov. 25, 1945. no. 6145). Suwo-jinsya, Shimada, Itano-gun (Y. AKASAWA! Nov. 14, 1945. no. 6053). Hitomaru-jinsya, Satoura-cho (Y. AKASAWA! Oct. 14, 1945. no. 5318). Mt. Bizan, Tokusima-city (Y. AKASAWA! Mar. 6, 1946. no. 7577). Koritori-bashi, Mt. Tsurugi (Y. AKASAWA! Aug. 2, 1931. no. 125). Omote-michi, Mt. Tairyuji-san, Naka-gun (Y. AKASAWA! Aug. 16, 1961. no. 15). Dekubo-dani, Shishikui-cho (Y. AKASAWA! Aug. 4, 1962. no. 62-A-359). Ohoyama-jinsya, Shiohuka, Shishikui-cho (Y. AKASAWA! Aug. 4, 1962. no. 62-A-402). Inter Dekubodani et Ohoyama, Shishikui-cho (Y. AKASAWA! Aug. 4, 1962. no. 62-A-366).

Prov. Sanuki : Itsuponmatsu-goe, Aioi-mura, Ohokawa-gun (Y. AKASAWA! Jul. 27, 1939. no. 4771).

Distr. Hokukaido, Honsyu, Kyusyu, Korea, Manchuria, China, Formosa, Ryukyu, Philippines, India.

***Crypsinus hastatus*** (THUNBERG) COPELAND *form. cristatus* (YAMANAKA) AKASAWA, *comb. nov.*

*Phimatopsis hastata* (THUNBERG) KITAGAWA *f. cristata* YAMANAKA in Sched. Herb. Univ. Kyoto.

*Crypsinus hastatus* (THUNBERG) COPELAND *form. cristatus* NAMEGATA, Coll. Cult. Fern. & Fern Allies 329 (1961), *nom. nud.*

Apices frondorum cristato-multifidae.

Nom. Jap. *Shishi-uraboshi*, *Yatomiurabosi*.

Hab. Prov. In oppido Amatsubo (T. YAMANAKA! Jun, 5, 1950.-K) Typus!

Distr. Honsyu (Prov. Shimohusa apud. NAMEGATA).

***Crypsinus hastatus*** (THUNBERG) COPELAND *form. incisus* (MAKINO) NAMEGATA et KURATA in NAMEGATA, Coll. Cult. Fern. & Fern Allies, 329 et 340 (1961).

*Polypodium hastatum* THUNBERG *var. incisum* MAKINO in Bot. Mag. Tokyo, XXIV. 30 (1910). MAKINO et NEMOTO, Fl. Jap. ed. 2. 88 (1931).

*Phimatopsis hastata* (THUNB.) KITAGAWA *f. incisum* (MAKINO) H. ITO in Journ. Jap. Bot. XI. 99 (1935), *ut f. nicisa* H. ITO. HONDA, Nom. Pl. Jap. 19 (1939).

Nom. Jap. *Hugire-mitsude-urabosi*.

Hab. Prov. Awa : Habayama-mura, Mima-gun (Y. AKASAWA! Feb. 26, 1946. no. 7551).

Distr. Honsyu.

**Crypsinus hastatus** (THUNBERG) COPELAND form. **nikkoense** (CHRIST) AKASAWA, comb. nov.

*Polypodium hastatum* THUNBERG var. *nikkoense* CHRIST ex MATSUMURA in Bot. Mag. Tokyo, XXIV. 242 (1910). MAKINO et NEMOTO, Fl. Jap. ed. 2. 88 (1931).

*Phymatopsis hastata* (THUNB.) KITAGAWA f. *nikkoensis* (CHRIST) H. ITO in Journ. Bot. XI. 99 (1935). HONDA, Nom. Pl. Jap. 19 (1939).

Nom. Jap. *Nikkohitode*

Hab. Prov. Tosa : Arakura-jinsya, Hirose, Okinosima (Y. AKASAWA! Jul. 28, 1953. no. 107631). Sawando, Behu, Takaoka-gun (Y. AKASAWA! Dec. 23, 1951. no. 101023).

Distr. Honsyu.

**Crypsinus hastatus** (THUNBERG) COPELAND var. **yoshinagae** (MAKINO) NAMEGATA et KURATA, Coll. Cult. Fern. & Fern Allies 330 et 340 (1961).

*Polypodium hastatum* THUNBERG var. *Yoshinagae* MAKINO in Bot. Mag. Tokyo, XXVII. 253 (1913). MAKINO et NEMOTO, Fl. Jap. ed. 2. 88 (1931).

*Phymatopsis hastata* (THUNBERG) KITAGAWA f. *Yoshinagae* (MAKINO) H. ITO in Journ. Jap. Bot. XI. 99 (1935). HONDA, Nom. Pl. Jap. 20 (1939).

Nom. Jap. *Kujyakuurabosi*.

Hab. Prov. Tosa : Kamo-mura, Takaoka-gun (T. YOSHINAGA! fide Makino).

Distr. Shikoku.

**Crypsinus veitchii** (BAKER) COPELAND, Gen. Fil. 206 (1947). TAGAWA in Acta Phytotax. Geobot. XV. 143 (1954), Colour. Ill. Jap. Pterid. 165 et 193 Pl. 70 fig. 385 (1959). HONDA, Nom. Pl. Jap. ed. emend. 18 (1957). OHWI, Fl. Jap. Pterid. 156 (1957).

*Polypodium Veitchii* BAKER, Gard. Chron. n. s. XIV. 494 (1880). MATSUMURA, Ind. Pl. Jap. I. 340 (1904). TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 296 (1915). OGATA, Ic. Fil. Jap. I. pl. 40 (1928). MAKINO et NEMOTO, Fl. Jap. ed. 2. 96 (1931). MAKINO, Ill. Fl. Nipp. 917 fig. 2750 (1940).

*Polypodium senanense* MAXIMOWICZ in Mém. Biol. XII. 571 (1886). MAKINO, Phan. Pter. Jap. Ic. Ill. I. pl. 69 et 70 (1901). MATSUMURA, Ind. Pl. Jap. I. 338 (1904).

*Polypodium sensiense* CHRIST var. *filipes* CHRIST in Bull. Herb. Boiss. IV. 618 (1904). MAKINO et NEMOTO, Fl. Jap. ed. 2. 93 (1931).

*Phymatodes Veitchii* (BAKER) CHING, Contr. Inst. Bot. Nat. Acad. Peiping II. 84 (1933).

*Phymatopsis Veitchii* (BAKER) H. ITO in Journ. Jap. Bot. XI. 100 (1935), Fil. Jap. Ill. f. 388 (1944). HONDA, Nom. Pl. Jap. 20 (1939).

*Phymatopsis Veitchii* (BAKER) H. ITO var. *filipes* (CHRIST) H. ITO in Journ. Jap. Bot. XI. 100 (1935). HONDA, Nom. Pl. Jap. 20 (1939).

Nom. Jap. *Miyamaurabosi*. *Himemiyama-urabosi*.

Hab. Prov. Iyo : Heigamori, Ni-gun (Z. TASHIRO! Aug. 18, 1918-K).

Prov. Awa : Yatsura-jinsya, Mt. Tsurugi (Y. AKASAWA! Jul. 27, 1952. no. 104171). Ryotsurugi, Mt. Tsurugi (Y. AKASAWA! Aug. 3, 1951 no. 70216).

Distr. Hokukaïdo, Honsyu, Korea (Quelpaert), China to Tibet.

**Drymotaenium MAKINO**

クラガリシダ属

**Drymotaenium Miyoshianum** (MAKINO) MAKINO in Bot. Mag. Tokyo, XV. 102 (1901), Phan. Pter. Jap. Icon. Ill. I. pl. 56-58 (1901), Ill. Fl. Nipp. 914 f. 2739 (1940). MATSUM., Ind. Pl. Jap. I. 306 et 388 (1904). C. CHR. in Acta Hort. Gothob. I. 98 (1904), *excl. Vittaria suberosa* CHRIST. in Dansk. Bot. Ark, VI. 53 pl. 7 f. 4 (1929), in Contr. U. S. Hort. Herb. 26. 314 (1931). MAKINO et NEMOTO, Fl. Jap. 1608 (1925), ed. 2. 50 (1931). OGATA, Ic. Fil. Jap. I. Pl. 19 (1928). HAND.-MAZZ., Symb. Sin. VI. 42 (1929). CHING in Bull. Fan. Mem. Inst. Biol. I. 153 f. 2 (1930). TAGAWA in Acta Phytotax. Geobot. VI. 98 (1937), Colour. Ill. Jap. Pterid. 158 et 204 Pl. 68. fig. 365 (1959). HONDA, Nom. Pl. Jap. 12 (1939), ed. emend. 18 (1957). H. ITO, Fil. Jap. Ill. f. 426 (1944). COPELAND, Gen. Fil. 190 (1947).

*Taenitis* sp., MIYOSHI in Bot. Mag. Tokyo, III. 351-353 tab. XIII (1889).

*Taenitis Miyoshiana* MAKINO in Bot. Mag. Tokyo, VIII. 149 (1894), XII. 26 (1898), XV. 59 (1901).

*Pleurogramme robusta* CHRIST in Bull. Herb. Boiss. VI. 867 (1898).

*Monogramma robusta* (CHRIST) C. CHR., Ind. Fil. 431 (1906).

Nom. Jap. *Kuragari-sida*.

Hab. Prov. Tosa : Kuono, Higashitoyonaga-mura, Nagaoka-gun (T. YOSHINAGA! Aug. 26, 1911-K). Ege-yama, Aki-gun (J. SHIRAGAMI! Aug. 1909-K). Ege, Aki-gun (I. KATO! Oct. 27, 1939-K).

Distr. Honsyu, Formosa et China.

**Lemmaphyllum PRESL**

マメツタ属

**Lemmaphyllum microphyllum** PRESL, Epim. Bot. 263 (1849), *excl. spec. ex Jav.* C. CHR., Dansk. Bot. Ark. VI. 46 Pl. 5 f. 1. 2 (1929). CHING in Bull. Fan. Mem. Inst. Biol. IV. 102 (1933), Icon. Fil. Sin. II. Pl. 80 (1934). TAGAWA in Acta Phytotax. Geobot. VI. 242 (1937), Colour. Ill. Jap. Pterid. 159 et 224 Pl. 68 f. 367 (1959). HONDA, Nom. Pl. Jap. 16 (1939). OGATA in Journ. Jap. Bot. XV. 693 (1939). H. ITO, Fil. Jap. Pterid. 150 (1944). OHWI, Fl. Jap. Pterid. 150 (1957).

*Pteris piloselloides* (non L.) THUNBERG, Fl. Jap. 331 (1784).

*Drymoglossum subcordatum* FÉE, Gen. Fil. 94 tab. 9 fig. 3 (1851), *pro parte*. DIELS in ENGL. & PRANTL. Nat. Pfl.-fam. I-4. 303 (1898). CHR. in WARB. Mons. I. 66 (1900), *pro parte*. MAKINO, Shokubutsu Zukwan 1210 fig. 2295 (1925).

*Didymochlaena piloselloides* EATON in Mem. Americ. Acad. Arts. & Sci. n. s. IV. 329 (1857).

*Drymoglossum carnosum* J. SMITH *var. minor* HOOK., Sp. Fil. 189 (1863), *ex pl. Formosa.*, MAKINO, Phaner. Pterid. Jap. Icon. I. t. 27 (1899). MATSUMURA, Ind. Pl. Jap. I. 388 (1904).

*Taenitis microphylla* (PRESL) METT. *ex MIQ.*, Prol. Fl. Jap. 334 & 389 (1867), in Ann.

Mus. Bot. Lugd.-Bat. III. 170 (1867).

*Drymoglossum carnosum* HOOK. var *subcordatum* HOOK. & BAK., Syn. Fil. 397 (1868),  
excl. syn. MATSUMURA, Ind. Pl. Jap. I. 388 (1904), excl. pl. Formos..

*Drymoglossum microphyllum* (PRESL) C. CHR., Ind. Fil. 246 (1905), pro parte. MATH.,  
in Journ. Linn. Soc. XXXIX. 359 (1911). MAKINO et NEMOTO, Fl. Jap. 1607 (1925)  
ed. 2. 50 (1931). NAKAI in Bot. Mag. Tokyo, XL. 393 (1926). MASAMUNE, Prel. Rep.  
Veg. Yak. 26 (1929), Fl. Geobot. Stud. Yak. 90 (1934). OGATA, Icon. Fil. Jap. IV.  
164 (1931). MAKINO, Ill. Fl. Nipp. 914 fig. 2740 (1940).

*Drymoglossum carnosum* J. SMITH var. *microphyllum* (PRESL) NAKAI, Fl. Korea. II. 413  
(1911), in Bot. Mag. Tokyo, XXVIII. 93 (1914).

Nom. Jap. *Mamezuta*.

Hab. Prov. Tosa : Insl. Okinosima, Hata-gun (M. TAGAWA! Jul. 20, 1931-K).  
Inter Moshima et Koyano, Isl. Okinosima (Y. AKASAWA! Mar. 31, 1958.  
no. 58-968). Koyano, Isl. Okinosima (Y. AKASAWA! Mar. 31, 1958. no.  
58-982). Isl. Kasiwa-jima (Y. AKASAWA! Jul. 27, 1953. no. 107830). Soga-  
jinsya, Yamaji, Yatsuka-mura (Y. AKASAWA! Aug. 10, 1953. no. 102213).  
Nakatsu-keikoku, Nanokawa (Y. AKASAWA! May. 23, 1935. no. 21162).  
Kawamata, Gohoku-mura, Agawa-gun (Y. AKASAWA! Aug. 31, 1962. no.  
62-T-225). Sugihara, Mt. Yokogura (Y. AKASAWA! Sept. 13, 1953. no.  
108817). En route from Konotani to Naruyama, Ino-cho (Y. AKASAWA! Apr.  
5, 1962. no. 62-T-302). Anagawa, Kagami-mura (Y. AKASAWA! Dec. 4,  
1955. no. 33643). Godaisan, Kochi-city (Y. AKASAWA! Mar. 9, 1952. no.  
106986). Kochi-jo, Kochi-city (Y. AKASAWA! Feb. 28, 1953. no. 103997).  
Mt. Takami-yama, Kochi-city (Y. AKASAWA! Oct. 5, 1957). Engyoji,  
Kochi-city (Y. AKASAWA! Nov. 12, 1935.). Hizima, Kochi-city (Y. AKA-  
SAWA! Dec. 14, 1952. no. 103528). Ryugado, Kami-gun (Y. AKASAWA!  
Nov. 9, 1952. no. 1033678). Bisayamon-no-taki, Amatubo-mura (Y. AKASAWA!  
Jul. 11, 1955. no. 33094). Niida-jinsya, Ohotani, Nishikawa-mura (Y. AKA-  
SAWA! Dec. 21, 1952. no. 103488). Sekisen, Yanase (Y. AKASAWA! Aug.  
13, 1957). Kasuga-jinsya, Narukawa, None-cho (Y. AKASAWA! Nov. 22,  
1955. no. 33341).

Prov. Iyo : Ōsima-jinsya, Miso-mura (M. OGATA! 1922-K). Sasa-yama,  
Minamiuwagun (M. OGATA! Aug. 11, 1939-K).

Prov. Awa : Okame, Ohogejima (Y. AKASAWA! Nov. 25, 1945. no. 6116).  
Benten-jima, Komatsujima-cho (Y. AKASAWA! May. 26, 1950. no. 55027).  
Wakasugi, Naka-gun (Y. AKASAWA! Jan. 6, 1940. no. 7377). Mt. Tairyu-ji,  
Naka-gun (Y. AKASAWA! Aug. 13, 1961. no. 48). Shiro-yama, Tokusima-  
city (Y. AKASAWA! Nov. 24, 1950). Mt. Kotsu-san, Oe-gun (Y. AKASAWA!  
Feb. 25, 1948). Hashikura, Miyoshi-gun (Y. AKASAWA! Oct. 30, 1945. no.  
5691). Ishi, Shishikui-cho (Y. AKASAWA! Aug. 6, 1962. no. 62-A-623).  
Ohoyama-jinsya, Asakawa-mura, Kaihu-gun (Y. AKASAWA! Aug. 1, 1962.  
no. 62-A-5).



Prov. Sanuki : Kōuntei, Kankakei, Isl. Syodosima (Y. AKASAWA! Nov. 6, 1958.). Do-no-kwanon, Isl. Syodo-sima (Y. AKASAWA! Nov. 8, 1958).

Distr. Honsyu, Kyusyu, Korea, Formosa et China.

### Lepisorus (J. SM.) CHING

ノキシノブ属

**Lepisorus annuifrons** (MAKINO) CHING. Bull. Fan. Mem. Inst. Biol. IV. 70 (1933). H. ITO in Journ. Jap. Bot. XI. 91 (1935), in Bot. Mag. Tokyo, XLIX. 485 (1935), Fil. Jap. III. f. 396 (1944). HONDA, Nom. Pl. Jap. 16 (1939), ed. emend. 18 (1957). TAGAWA, Colour. Ill. Jap. Pterid. 224 Pl. 67 fig. 360 (1959).

*Polypodium japonense* MAKINO in Bot. Mag. Tokyo, XII. 165 (1898), *nom. nud.* MATSUM., Ind. Pl. Jap. I. 335 (1904).

*Polypodium annuifrons* MAKINO in Bot. Mag. Tokyo, XIII. 48 (1899), Phaner. Pterid. Jap. Icon. I. t. 7 (1899), Ill. Fl. Nipp. 916 f. 2747 (1940). TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 281 (1915). MIYABE et KUDO, Fl. Hokk. & Sagh. 42 (1930). MAKINO et NEMOTO, Fl. Jap. ed. 2. 84 (1931). OGATA, Ic. Fil. Jap. IV. Pl. 186 (1931).

*Polypodium Schraderi* (*non* METTEN.) MAXIMOWICZ, *in litt.* ex MAKINO, Phaner. Pterid. Jap. Icon. 1 (1901).

*Pleopeltis annuifrons* (MAKINO) NAKAI ex HARA in Journ. Jap. Bot. IX. 185 (1933). OHWI, Fl. Jap. Pterid. 148 (1957).

Nom. Jap. *Hotei-sida*.

Hab. Prov. Tosa : The ravine of Sōgatani in Mt. Irazu, Higasitunoyama-mura, Tokaoka-gun (M. TAGAWA! Sept. 4, 1939-K).

Prov. Iyo : Hushiyasu, Hiyoshi-mura, Kitauwa-gun (H. YAMAMOTO! Aug. 14, 1928-K). Mt. Odamiyama (Y. DOI! Aug. 27, 1927-K). *ibid.* (T. IMAIZUMI! Oct. 18, 1925-K). Inter Omogo-kei et Mt. Marutaki-yama (Y. AKASAWA! Jul. 26, 1955. no. 31109). Miyoga-goe, Kamiukiana-gun (H. YAMAMOTO! 1915.-K).

Prov. Awa : Mt. Sanrei, Higashi-iyayama-mura, Mima-gun (Y. AKASAWA! Aug. 26, 1948). Mt. Tsurugi (T. HIROZU! Aug. 12, 1905-K). *ibid.* (Y. AKASAWA! Aug. 12, 1936. no. 1629). Inter Nagoro et Minokoshi, Mt. Tsurugi (Y. AKASAWA! Aug. 12, 1954). Tonomaru, Mt. Tsurugi (Y. AKASAWA! Jul. 29, 1958. no. 58-414). Hujinoike-toge, Mt. Tsurugi (Y. AKASAWA! Jul. 25, 1952. no. 104206). Sawatani-mura (G. NAKAI! Sept. 27, 1949-K). Sasahara, Sawatani-mura (Y. AKASAWA! Jun. 24, 1948). Tosutoge, Myozai-gun (Y. AKASAWA! Aug. 2, 1939).

Distr. Hokukaido, Honsyu, Kyusyu.

**Lepisorus onoei** (FR. et SAV.) CHING, Bull. Fan. Mem. Inst. Biol. IV. 87 (1933). H. ITO in Journ. Jap. Bot. XI. 93 (1935), in Bot. Mag. Tokyo, XLIX. 485 (1935), Fil. Jap. III. f. 403 (1944). HONDA, Nom. Fl. Jap. 17 (1939), ed. emend. 19 (1957).

- TAGAWA, Colour. Ill. Jap. Fterid. 158 et 224 Pl. 67 fig. 362 (1959).
- Polypodium Onoei* FR. et SAV., Enum. Pl. Jap. II. 246 (1877), *pro parte*. 642 (1878).
- Polypodium lineare* THUNB. var. *Onoei* (FR. et SAV.) MAKINO in Bot. Mag. Tokyo, XI. 282 (1897), Phaner. Pterid, Jap. Icon. I. t. 10 (1901). MATSUM., Ind. Pl. Jap. I. 336 (1904). MATH. in Journ. Linn. Soc. XXXIX. 380 (1911). MASAMUNE, Fl. Geobot. Stud. Isl. Yakusima 94 (1934).
- Polypodium lineare* THUNB. var. *subspathulatum* TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 270 (1915), *excl. basion. pro parte*. OGATA, Icon. Fil. Jap. II. pl. 87 (1929). MAKINO et NEMOTO, Fl. Jap. ed. 2. 90 (1931).
- Polypodium Thunbergianum* MAKINO var. *Onoei* (FR. et SAV.) MAKINO ex MAKINO III. Fl. Nipp. 916 f. 2745 (1940).
- Pleopeltis onoei* (FR. et SAV.) OKUYAMA, Hand. Pl. Coll. 277 (1953). OHWI, Bull. Nat. Sci. Mus. Tokyo, III-2. 99 (1956), Fl. Jap. Pterid. 147 (1957).
- Nom. Jap. *Hime-nokisinobu*.
- Hab. Prov. Tosa : The ravine of Narukawa-dani in Mt. Kakuden-yama, Takaoka-gun (M. TAGAWA! Sept. 7, 1939-K). Mt. Irazu-yama in Higasitunoyama-mura, Takaoka-gun (M. TAGAWA! Sept. 5, 1939-K). Hoonokawa, Takaoka-gun (Y. AKASAWA! Oct. 1, 1935. no. 882). Mt. Gozaisyo-yama, north side alt. 800 m. Gohoku-mura (Y. AKASAWA! Aug. 30, 1962. no. 62-T-138). Mt. Kokuzo-san (Y. AKASAWA! Nov. 16, 1952. no. 103054). Hamegano-michi, Mt. Shiraga, Motoyama-cho (Y. AKASAWA! Jul. 25, 1957). Sekisen, Yanase-mura, Aki-gun (Y. AKASAWA! Aug. 13, 1957). Tengumori, Umaji-mura (Y. AKASAWA! Aug. 17, 1957). Makiyama, (Y. AKASAWA! Jul. 11, 1953. no. 107156). Behu, Mt. Ishidate (Y. AKASAWA! Jul. 12, 1953. no. 107321). Prov. Awa : Hukuhara-mura, Katsuura-gun (S. KITAMURA et G. NAKAI! Oct. 29, 1951-K). Mt. Tairyuji (Z. TASHIRO! Aug. 18, 1930-K). *ibid.* (Y. AKASAWA! Jul. 22, 1952. no. 101371). Sawatani-mura, Naka-gun (Y. AKASAWA! Jun. 22, 1948). Kawanari, Sawatani-mura (Y. AKASAWA! Mar. 31, 1952. no. 103995). Azegano, Okukito-mura (Y. AKASAWA! Oct. 10, 1947). Hiya-tani, Shishikui-cho (Y. AKASAWA! Aug. 5, 1962. no. 62-A-475). Ishi, Shishikui-cho (Y. AKASAWA! Aug. 6, 1962. no. 62-A-681).
- Prov. Iyo : Mt. Nametoko-yama (M. OGATA! Sept. 10, 1928-K). Omogomichi, Mt. Isizuchi (Y. AKASAWA! Jul. 31, 1952. no. 104512). Kamehara, Omogo-kei, Kamiukiana-gun (Y. AKASAWA! Jul. 25, 1955. no. 30632).
- Distr. Hokukaido, Honsyu, Kyusyu et Korea.
- Lepisorus thunbergianus* (KAULE.) CHING, Bull. Fan. Mem. Inst. Biol. IV. 88 (1933), Icon. Fil. Sin. II. pl. 76 (1934). H. ITO in Journ. Jap. Bot. IX. 93 (1935), in Bot. Mag. Tokyo, XLIX. 583. 486 (1935), Fil. Jap. III. f. 393 (1944). TAGAWA in Acta Phytotax. Geobot. VI. 242 (1937). Colour. Ill. Jap. Pterid. 158 et 224 Pl. 67 fig. 364 (1959). HONDA, Nom. Pl. Jap. 17 (1939), ed. emend. 19 (1957).
- Polypodium lineare* THUNBERG, Fl. Jap. 335 (1784), non BURM. 1768 nec HOUTT., Ic. Pl. Decas. II. tab. 9 (1800). FR. et SAV., Enum. Pl. Jap. II. 245 (1876). MIQ. in Ann. Mus. Bot. Lugd.-Bat. III. 170 (1869). HOOK. et BAK., Syn. Fil. 354 (1868).

- LUERSS. in ENGL. Bot. Jahrb. IV. 360 (1883). BAKER in Journ. Bot. XXIII. 106 (1885). MAKINO, Phan. Pter. Jap. Ic. III. I. Pl. 9 (1899). MATSUM., Ind. Pl. Jap. I. 335 (1904). OGATA, Icon. Fil. Jap. II. Pl. 86 (1929). MIYABE et KUDO, Fl. Hokk. & Sagh. 41 (1930).
- Pleopeltis thunbergiana* KAULE., Wesen. Farrenkr. 113 (1827). AKASAWA in Rep. Usa Marine Biol. Stat. IV. 26 (1957). OHWI, Fl. Jap. Pterid. 146 (1957). COPELAND, Fern. Fil. Philip. III. 463 (1960).
- Polypodium lineare* THUNB. var. *Thunbergianum* (KAULF.) TAKEDA in Notes Roy. Bot. Gard. Edinb. VIII. 268 (1915). MAKINO et NEMOTO, Fl. Jap. ed. 2. 89 (1931).
- Pleopeltis linearis* (THUNB.) MOORE, Ind. Fil. 346 (1862), non KAULF.
- Polypodium Thunbergianum* (KAULF.) MAKINO, Ill. Fl. Nipp. 915 f. 2744 (1940).  
Nom. Jap. *Nokisinobu*.
- Hab. Prov. Tosa : Isl. Okino-sima (M. TAGAWA! Jul. 19, 1931-K). Mosima, Isl. Okinosima (Y. AKASAWA! Jul. 27, 1953. no. 107620). Tengenohana, Asizurimisaki (Y. AKASAWA! Jul. 31, 1953. no. 107970). Kashiwa-jima (Y. AKASAWA! Jul. 27, 1953. no. 107829). Nakatsu-keikoku, Nanokawa-mura (Y. AKASAWA! May, 23, 1955. no. 21105). The state forest of Todoro-yama in Simohayama-mura, Takaoka-gun (M. TAGAWA! Aug. 26, 1939-K). The state forest of Hōnokawayama, Kakuden-yama, Kamibun-mura (M. TAGAWA! Aug. 24, 1939-K). Ryu, Usa-cho (Y. AKASAWA! Nov. 20, 1954. no. 784). Nishiyama, Ogawa-mura (Y. AKASAWA! Oct. 25, 1953. no. 109624). Katsugase, Mitsuse-mura, Agawa-gun (Y. AKASAWA! May, 29, 1955. no. 32986). Kawamata, Gohoku-mura (Y. AKASAWA! Aug. 31, 1962. no. 62-T-225). Hirose, Tosa-yama-mura (Y. AKASAWA! Jun. 9, 1955. no. 32683). Dainibuchi, Nanatsubuchi (Y. AKASAWA! Apr. 21, 1956.). Nakasuka, Kochi-city (Y. AKASAWA! Apr. 12, 1953. no. 104639). Koda, Kochi-city (Y. AKASAWA! Mar. 6, 1953. no. 104157). Godaisan, Kochi-city (Y. AKASAWA! Nov. 21, 1954). Kochi-jo (Y. AKASAWA! Feb. 27, 1953. no. 104007). Hameganomichi. Mt. Shiraga-yama (Y. AKASAWA! Jul. 25, 1957). Niida-Jinsya, Nishikawa-mura, Kami-gun (Y. AKASAWA! Dec. 21, 1952. no. 103482). Mt. Ishidate (Y. AKASAWA! Oct. 11, 1960. no. 60-41). Makiyama-mura (Y. AKASAWA! Jul. 10, 1953. no. 107113). Erma, Geisei-mura (Y. AKASAWA! May, 30, 1962. no. 62-T-411). Hachiman-jinsya. Aki-city (Y. AKASAWA! Jun. 15, 1958. no. 58-86). Muroto-misaki (G. KOIDZUMI! Sept. 3, 1934-K). *ibid.* (Y. AKASAWA! Apr. 1, 1957). Nakanokawa, Yasuda-cho (Y. AKASAWA! Jun. 16, 1961. no. 170). Sekisen, Yanase (Y. AKASAWA! Aug. 13, 1957). Inter Kurose et Kawaguchi, None-cho (Y. AKASAWA! Nov. 22, 1955. no. 33375).
- Prov. Iyo : Kuroiwa-yama (M. OGATA! Nov. 27, 1927-K).
- Prov. Awa : Sawatani-mura (Y. AKASAWA! Jun. 22, 1948). Ishi, Shishikui-cho (Y. AKASAWA! Aug. 6, 1962. no. 62-A-657). Hiyadani, Shishikui-cho (Y. AKASAWA! Aug. 5, 1962. no. 62-A-456). Dekubodani, Shishikui-cho (Y. AKASAWA! Aug. 4, 1962. no. 62-A-373). Mt. Tsurugi (Y. AKASAWA!

Jul. 12, 1936. no. 1663). Tōnomaru, Mt. Tsurugi (Y. AKASAWA! Jul. 29, 1958. no. 58-415). Tosu-toge, Miyozai-gun (Y. AKASAWA! Aug. 2, 1939). Orino, Kitanada-mura (Y. AKASAWA! Nov. 11, 1945. no. 5892). Ōasa-jinsya, Bando-cho (Y. AKASAWA! Jan. 23, 1946. no. 7440). Hitomaru-jinsya, Satoura-mura (Y. AKASAWA! Oct. 14, 1945). Hashikura-ji, Miyosi-gun (Y. AKASAWA! Oct. 30, 1945. no. 5633).

Prov. Sanuki : Kountei, Kankakei, Isl. Syodo-sima (Y. AKASAWA! Nov. 6, 1958).

Distr. Hokukaido, Honsyu, Kyusyu, Korea, Formosa, China, Indo-china et Philippines.

**Lepisorus tosaensis** (MAKINO) H. ITO in Journ. Jap. Bot. XI. 93 (1935), Fil. Ill. Jap. f. 395 (1944). HONDA, Nom. Pl. Jap. 17 (1939), ed. emend. 19 (1957). TAGAWA in Acta Phytotax. Geobot. XI. 304 (1942), Colour. Ill. Jap. Pterid. 158 et 225 Pl. 67 fig. 363 (1959).

*Polypodium lineare* THUNB. var. *caudatum* MAKINO in Bot. Mag. Tokyo, XVII. 78 (1903). MATSUM., Ind. Pl. Jap. I. 392 (1904).

*Polypodium lineare* THUNB. var. *contortum* CHRIST sensu MAKINO, Phani Pter. Jap. Ic. Ill. II. Pl. 98-100 (1903). MATSUM., Ind. Pl. Jap. I. 392 (1904).

*Polypodium tosaensis* MAKINO in Bot. Mag. Tokyo, XXVII. 127 (1913). MAKINO et NEMOTO, Fl. Jap. ed. 2. 95 (1931).

*Polypodium contortum* (non CHRIST) MAKINO et NEMOTO, Cat. Jap. Pl. Herb. Nat. Hist. Dept. Tokyo. Imp. Mus. 431 (1914).

*Pleopeltis tosaensis* (MAKINO) OHWI in Bull. Nat. Sci. Mus. Tokyo, III.-2. 99 (1956), Fl. Jap. Pterid. 148 (1957).

Nom. Jap. *Onaga-urabosi*, *Tsukushi-nokisinobu*.

Hab. Prov. Tosa : Imanoyama, Mihara-mura, Hata-gun (H. YAMAMOTO! Jan. 1, 1907-K). Hoonokawa (Y. AKASAWA! Oct. 1, 1935). The state forest of Hōnokawayama, Kamibun-mura. Takaoka-gun (M. TAGAWA! Aug. 24, 1939-K). The state forest of Todoro-yama in Shimohayama-mura. Takaoka-gun (M. TAGAWA! Aug. 26, 1939-K). Syogase, Mitsuse-mura (Y. AKASAWA! May, 29, 1955. no. 32808). Mitani, Kochi-city (Y. AKASAWA! Oct. 10, 1957). Tengenomori, 1104 m. alt. (Y. AKASAWA! Aug. 17, 1957). Yanase, Umazi-mura (M. TAGAWA! Aug. 18, 1930-K).

Prov. Awa : Kaizu, Kawakami-mura, Kaihu-gun (Y. AKASAWA! Aug. 2, 1962. no. 62-A-230). Dekubodani, Shishikui-cho (Y. AKASAWA! Aug. 4, 1962. no. 62-A-365). Hiyadani, Shishikui-cho (Y. AKASAWA! Aug. 5, 1962. no. 62-A-489). Inter Kama et Ishi, Shishikuicho (Y. AKASAWA! Aug. 6, 1962. no. 62-A-733).

Distr. Honsyu, Kyusyu et Formosa.

**Lepisorus Uchiyamae** (MAKINO) H. ITO in Journ. Jap. Bot. XI. 93 (1935), Fil. Jap. Ill. f. 402 (1944). HONDA, Nom. Pl. Jap. 17 (1939). TAGAWA in Acta Phytotax. Geobot. XIV. 47 (1950), Colour. Ill. Jap. Pterid. 157 et 225 Pl. 67 fig. 358 (1959). KURATA, Hokuriku Journ. Bot. IV. 44 (1955).

*Polypodium Uchiyamae* MAKINO in Bot. Mag. Tokyo, XX. 30 (1909). OGATA, Ic. Fil.

Jap. II. Pl. 91 (1929). MAKINO et NEMOTO, Fl. Jap. ed. 2. 95 (1931).

*Polypodium clathratum* CLARKE sensu TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 281 (1915), *pro parte*.

*Pleopeltis Uchiyamae* (MAKINO) OHWI in Bull. Nat. Sci. Mus. Tokyo, III-2. 99 (1956), Fl. Jap. Pterid. 147 (1957).

*Pleopeltis Uchiyamae* (MAKINO) AKASAWA in Rep. Usa Marine Biol. Stat. IV-5. 26 (1957), *excl. pl.*

Nom. Jap. *Ko-urabosi*.

Hab. Prov. Tosa : Hakusan, Asizuri-misaki (Y. AKASAWA! Jun. 20, 1952. no. 102458). Tengenohana, Ashizuri-misaki (Y. AKASAWA! Jun. 31, 1953. no. 107908). Nakanokawa, Nakayama-mura, Aki-gun (M. TAGAWA! Aug. 14, 1930-K). Yasuda, Aki-gun (M. TAGAWA! Aug. 19, 1929-K). Muroto-zaki (M. TAGAWA! Jul. 15, 1931-K). Bisuyo-iwa, Muroto-zaki (M. TAGAWA! Aug. 20, 1929-K).

Prov. Awa : Dewa-jima (Y. AKASAWA! Aug. 14, 1946).

Prov. Iyo : Tachimajiri, Uwa-gun (C. WATANABE! Jun. 10, 1934-K). Senzyo-mura, Nishiuwa-gun (Y. ONO! 1934-K).

Distr. Honsyu, Kyusyu et Ryukyu.

*Lepisorus ussuriensis* (REGEL et MAACK.) CHING var. *distans* (MAKINO) TAGAWA in Acta Phytotax. Geobot. XI. 236 (1942), Colour. III. Jap. Pterid. 157 et 225 Pl. 67 fig. 361 (1959). HONDA, Nom. Pl. Jap. ed. emend. 19 (1957).

*Polypodium sesquipedale* WALL. f. *leiopteris* MAKINO, Phan. Pter. Jap. Ic. III. I. Pl. 8 (1899), *excl. basion*.

*Polypodium lineare* THUNB. var. *distans* MAKINO in Bot. Mag. Tokyo, XV. 60 (1901). MATSUM., Ind. Pl. Jap. I. 336 (1904).

*Polypodium distans* (MAKINO) MAKINO in Bot. Mag. Tokyo, XX. 31 (1906), *non K.L.F. 1824. Don. 1825. RADDE 1825.*

*Polypodium annuifrons* MAKINO var. *distans* (MAKINO) NAKAI, Fl. Kor. II. 414 (1911).

*Polypodium lineare* THUNB. var. *ussuriense* (*non* CHRISTENSEN) TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 271 (1915), *pro parte*.

*Polypodium ussuriense* REGEL sensu OGATA, Icon. Fil. Jap. II. Pl. 92 (1929). MIYABE et KUDO, Fl. Hokk. & Sagh. 41 (1930). MAKINO, Ill. Fl. Nipp. 916 f. 2747 (1940).

*Pleopteris ussuriensis* REGEL et MAACK sensu HARA in Journ. Jap. Bot. IX. 186 (1933).

*Pleopeltis ussuriensis* REGEL et MAACK var. *distans* (MAKINO) OKUYAMA ex OHWI, Fl. Jap. Pterid. 148 (1957).

Nom. Jap. *Miyama-nokisinobu*.

Hab. Prov. Tosa : Mt. Tebako-yama (Y. AKASAWA! Jul. 17, 1957). Mt. Irazu-yama (M. TAGAWA! Sept. 5, 1939-K). Tsuetate-toge, Nishitoyonaga-mura, Nagaoka-gun (Y. AKASAWA! Nov. 23, 1948. no. 100233). Ryuô-no-taki, Mt. Kajigamori (Y. AKASAWA! Jul. 19, 1955. no. 30285). Mt. Kajigamori, 1400 m. alt. (Y. AKASAWA! Jul. 20, 1955. no. 30358). Mt. Zinkitimori, Umazi-mura, Aki-gun (M. TAGAWA! Aug. 20, 1930-K). Mt. Ishidate (Y.

AKASAWA! Jul. 12, 1953. no. 107479). Behu-michi, Mt. Ishidate (Y. AKASAWA! Jun. 12, 1953. no. 107343).

Ptov. Awa : Nakatsuyama, Nishi-iyayama-mura (Y. AKASAWA! Aug. 10, 1954). Hujinoike-toge, Mt. Tsurugi (Y. AKASAWA! Jul. 25, 1952. no. 105073). Ohanabatake, Mt. Tsurugi (Y. AKASAWA! Jul. 15, 1956). Inter Kawamata et Miyoto-ike, Mt. Tsurugi (G. NAKAI! Sept. 26, 1949-K). Korinoseki, Mt. Tsurugi (Y. AKASAWA! May, 17, 1953. no. 105813). Yatsura, Mt. Tsurugi (Y. AKASAWA! Aug. 12, 1950. no. 70491). Hurutsurugi, Mt. Tsurugi (Y. AKASAWA! Aug. 3, 1951. no. 70279). Tsuzuro, Mt. Tsurugi (Y. AKASAWA! Jul. 24, 1947). Inter Mt. Jirokyu et Maruishiyama (Y. AKASAWA! Aug. 4, 1951. no. 70192). Nishijima, Mt. Tsurugi (Y. AKASAWA! Aug. 26, 1955. no. 32237). Ryutoge, Miyahama-mura (S. KITAMURA et G. NAKAI! May, 30, 1951-K).

Prov. Iyo : Omogo (H. YAMAMOTO! Aug. 24, 1915-K). Inter Omogokei et Marutaki-yama (Y. AKASAWA! Jul. 26, 1955. no. 31022). Inter Marutaki-yama et Tsuchigoya (Y. AKASAWA! Jul. 26, 1955. no. 31175). Osogoe, Kamiukiana-gun (H. YAMAMOTO! Oct. 10, 1915-K).

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### Microsorium LINK

ヌカボシクリハラシ属

*Microsorium buergerianum* (MIQ.) CHING, Bull. Fan. Mem. Inst. Biol. IV. 302 (1933), Icon. Fil. Sin. II. pl. 85 (1934). H. ITO in Bot. Mag. Tokyo. XLIX. 487 (1935), in Journ. Jap. Bot. XI. 96 (1935), Fil. Jap. III. f. 408 (1944). TAGAWA in Acta Phytotax. Geobot. VI. 242 (1937), Colour. Ill. Jap. Pterid. 161 et 232 Pl. 69 fig. 373 (1959). HONDA, Nom. Pl. Jap. 18 (1939), ed. emend. 19 (1957). AKASAWA in Rep. Usa Marine Biol. Stat. IV-5. 26 (1957). OHWI, Fl. Jap. Pterid. 153 (1957).

*Polypodium buergerianum* MIQUEL in Ann. Lügdt.-Bat. III. 170 (1867). FR. et SAV., Enum. Pl. Jap. II. 245 (1876). BAK. in Ann. Bot. V. 475 (1891). CHR. in Warb. Mons. I. 61 (1900). MATSUMURA, Ind. Pl. Jap. I. 333 (1904). TAKEDA, Notes Roy. Bot. Gard. Edinb. VIII. 290 (1915).

*Polypodium superficiale* HOOK., Sp. Fil. V. 71 (1864). HOOK. et BAKER, Syn. Fil. 355 (1865). MATSUM., Ind. Pl. Jap. I. 339 (1904). DUNN et DUTCHER, Fl. Hongk. & Kwangt. 352 (1912). OGATA, Ic. Fil. Jap. III. pl. 145 (1930).

Nom. Jap. *Nukaboshi-kuriharan*.

Hab. Prov. Tosa : Kamoda, Kochi-city (Y. AKASAWA! May, 28, 1953. nos. 105674-80).

Prov. Iyo : Ôkuboyama, Midori-sozu-mura, Minami-uwa-gun (M. OGATA! Nov. 9, 1923-K).

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“to be continued”

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