

Spicilegium Pteridographiae Asiae Orientalis 9.

By

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田川基二：東亞羊齒植物考察 8.

109. *Asplenium trigonopterum* KUNZE in Bot. Zeit. VI. 524 (1848); — MATSUMURA, Ind. Pl. Jap. I. 292 (1904); — MAKINO & NEMOTO, Fl. Jap. ed. 2. 27 (1931).

Asplenium Mertensianum KUNZE, l. c. 525; — HOOKER & BAKER, Syn. Fil. 218 (1867); — MATSUMURA, l. c. 290; — MAKINO & NEMOTO, Fl. Jap. 1581 (1925); — OGATA, Ic. Fil. Jap. VI. pl. 257 (1935).

Nom. Jap. Ôba-no-hinokisida, Ôba-no-kôzakisida.

Hab. The Bonin Islands (S. NISIMURA! No. 41).

A. trigonopterum KUNZE and *A. Mertensianum* KUNZE are two names given to the sterile and fertile fronds of the same species respectively.

110. *Asplenium* (*Euasplenium*) *callicola* TAGAWA, sp. nov.

Rhizoma breve erectum vel ascendens, dense squamatum; squamis lineari-subulatis, ebenis, margine brunneis integris, ad 4 mm. longis, 0.5 mm. basi latis; frondibus caespitosis erectis. Stipes ebenus, nitidus, teres, supra non sulcatus, basi squamis lineari-subulatis ebenis margine brunneis integris 2-3 mm. longis et pilis brunneis claviformibus glandulosis vestitus, sursum glaber vel parcissime glanduloso-pilosus. Lamina triangularis, basi truncata latissima, versus apicem valde elongato-acuminata, ad 10 cm. longa, 6 cm. basi lata, tri- vel quadri-pinnatifida, modice firma, viridis, supra glabra, subtus pilis brunneis claviformibus glandulosis parce vestita; pinnis I ord. patentibus, a se 1-1.5 cm. remotis, in ambitu oblique ovatis obtusis, brevissime petiolulatis, basi anteriore truncatis subauriculatis, posteriore cuneatis, basalibus ad 3 cm. longis 1.5 cm. latis interdum acutiusculis et arcuato-patentibus; segmentis ultimis erecto-patentibus, uninerviis, sterilibus linearibus apice acutis vel obtusiusculis 0.5 mm. latis, fertilibus ovatis acutis saepe ad 1 mm. latis. Sori latere anteriore costae segmentorum ultimorum siti; indusiis membranaceis, pallidis, oblongis ad 1.5 mm. longis, saepe ultra $\frac{2}{3}$ mm. latis, margine integris; sporis reniforme-ellipsoideis reticulatis.

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Nom. Jap. Hosoba-kuroganesida, nom. nov.

Hab. Formosa: crevices of limestone-cliff between Seraoka and Tabito, prov. Kwarenkō (M. TAGAWA! No. 875. *Sept. 11, 1934*. Type in Herb. Imp. Univ. Kyoto).

This species is related to *Asplenium Toramanum* MAKINO, but differs from it in more finely dissected fronds which are evenly greenish on under surface. In *A. Toramanum* MAKINO the under surface of frond is dotted with very minute green spots on the pale ground.

III. **Pteris** (Eupteris) **angustipinna** TAGAWA, sp. nov.

Rhizoma breve oblique ascendens, apice rhizomatis et basibus stipitum squamatis; squamis linearibus vel subulato-linearibus, ad 3 mm. longis, 0.5 mm. latis, castaneis, margine integris vel ad basin interdum parce pilo-glandulosis, luminibus omnibus elongato-quadrangulatis. Stipites caespitosi glabri scabriusculi straminei basi brunnei supra sulcati, stipitibus frondum sterilium 3–10 cm. longis, fertilium 5–17 cm. longis. Laminae steriles rigide chartaceae, utrinque glabrae palmate tridivisae vel interdum pinnis lateralibus utroque latere 2 ornatae (pinnis lateralibus a se 1–2 cm. remotis, infimis interdum bipartitis, partibus posterioribus brevioribus quam anterioribus); pinnis linearibus sursum gradatim attenuatis acuminatis, margine minute depresso-subaristato-serratis (serratulis superioribus apice saepe plus minus incurvatis), 2–3 mm. raro ad 4–5 mm. latis; pinnis terminalibus 10–17 cm. longis, basi acutis breviter petiolulatis vel sessilibus; pinnis lateralibus ascendentibus, 5–10 cm. longis et paulo angustioribus quam pinnis terminalibus, basi obtusis sessilibus vel brevissime petiolulatis; costis pinnarum utrinque elevatis, supra leviter sulcatis; venis furcatis vel simplicibus, a costis c. 70° divaricatis, prope ad marginem appropinquatis. Laminae fertiles pinnatae interdum palmate tridivisae; pinnis linearibus, sursum gradatim attenuatis acuminatis, 2–4 mm. latis, partibus apicalibus sterilibus margine subaristato-serratis, serratulis plus minus incurvatis; pinnis terminalibus 10–27 cm. longis, basi acutis petiolulatis (petiolulis 3–15 mm. longis); pinnis lateralibus utrinque 2, ascendentibus, a se 15–20 mm. remotis, pinnis lateralibus superioribus 15–20 cm. longis basi obtusis sessilibus non decurrentibus, inferioribus 10–15 cm. longis basi obtusis vel acutis breviter petiolulatis interdum bipartitis, partibus posterioribus brevioribus quam anterioribus; costis pinnarum utrinque elevatis supra tenuiter sulcatis; venis generaliter simplicibus, paucis furcatis. Sori marginem partibus apicalibus sterilibus c. 1–4 cm. longis exceptis occupantes; indusiis membranaceis, 0.7 mm. latis, margine integris; paraphysibus paucis brevioribus quam stipitibus sporangiorum, non articulatis, cellulis 5–6 uniseriatim compositis; sporis globoso-tetraedricis, ubique gibbis rugiformibus flexuosis

ramosisque ornatis.

Nom. Jap. Hosoba-inomotosô, nom. nov.

Hab. Formosa: inter Hattûkwan et Tompo, prov. Taityû (M. TAGAWA! No. 478. Aug. 17, 1934. Type in Herb. Imp. Univ. Kyoto).

This species is near to *Pteris dactylina* HOOKER, but differs from it in longer scales of rhizome and fertile fronds with 5 narrower and longer pinnae.

var. **yamatensis** TAGAWA, var. nov.

Varietus pinnis sterilibus margine irregulariter argute serratis, serratis non depressis nec incurvatis, venis pinnarum sterilium laxius dispersis a typo diversa.

Nom. Jap. Hime-inomotosô, nom. nov.

Hab. Honsyû: between Mt. Sanzyô-ga-dake and Kasiwagi, prov. Yamato (G. KOIDZUMI! July 13, 1922).

112. ***Pteris* (Eupteris) ryukyuensis** TAGAWA, sp. nov.

Rhizoma breviter repens, apice squamis castaneis lineari-subulatis integris ad 2 mm. longis dense obtectum. Frondes caespitosae dimorphae. Stipites graciles glabri straminei vel subtus praecipue castanei supra sulcati, basi squamis castaneis lineari-subulatis ad 3 mm. longis parce obtecti; stipitibus frondum sterilium 3-7 cm. longis, fertilium 15-20 cm. longis. Laminae steriles palmate tridivisae, utrinque glabrae, chartaceae, pinnis terminalibus anguste lanceolatis vel linearibus, 5-12 cm. longis 7-12 mm. medio latis, apice acutis basi cuneatis sessilibus vel petiolulatis (petiolulis ad 7 mm. longis); pinnis lateralibus brevioribus quam pinnis terminalibus 2-7 cm. longis 8-10 mm. latis, polymorphis (ovatis, ovato-oblongis, lanceolatis, elongato-lanceolatis), erecto-ascendentibus, subfalcatis, apice acutis vel obtusis, basi obtusis sessilibus, interdum bipartitis, partibus posterioribus ovatis vel ovato-oblongis 1-2 cm. longis 5-8 mm. latis apice rotundatis vel obtusis basi cuneatis; marginibus pinnarum irregulariter serrato-denticulatis, dentibus apice plus minus incurvatis; costis pinnarum utrinque elevatis supra tenuiter sulcatis, venis a costis angulo 60°-70° divaricatis simplicibus vel furcatis. Laminae fertiles pinnatae vel palmate tridivisae (pinnis lateralibus interdum bipartitis), utrinque glabrae, pinnis linearibus 2.5-3 mm. latis, utrinque gradatim attenuatis, apice acuminatis denticulatis; pinnis terminalibus 10-17 cm. longis basi sessilibus breviter petiolulatis; pinnis lateralibus utrinque 2 (interdum 1), a se 3-5 cm. remotis, a rhachi angulo 30-40° divaricatis, superioribus 5-10 cm. longis sessilibus plus minus decurrentibus, inferioribus 8-16 cm. longis basi acuminatis sessilibus vel breviter petiolulatis, non decurrentibus, interdum bipartitis, partibus posterioribus 2-4 cm. longis; costis pinnarum utrinque elevatis supra tenuiter sulcatis,

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venis a costis angulo 60–70 divaricatis simplicibus vel furcatis. Sori marginem partibus apicalibus sterilibus c. 5 mm. longis exceptis ocupantes; indusiis membranaceis c. 0.5 mm. latis integris; paraphysibus paucis brevioribus quam sporangiis non articulatis; sporis globoso-tetraedricis ubique gibbis rugiformibus vel verruciformibus dense ornatis.

Nom. Jap. Ryûkyû-inomotosô, nom. nov.

Hab. Ryûkyû: on the bank of the river Benoti, Kundzan-gun, Isl. Okinawa (Z. TASIRO! Feb. 11, 1924. Type in Herb. Imp. Univ. Kyoto); Nakagami, Isl. Okinawa (G. KOIDZUMI! May 1923); Tokuti, Nakagusukumura, Nakagami-gun, Isl. Okinawa (S. TAWADA! Nos. 30, 31. May 20, 1933); Isl. Toku-no-sima (H. OHBA! No. 21. Aug. 25, 1928).

This species is nearest to *Pteris deltodon* BAKER, from which differs in dimorphic fronds and far much narrower fertile pinnae, the serration in sterile parts is also slightly different. The sterile fronds are shorter and have three pinnae, of which the lateral often furcate. The fertile fronds are rarely trifoliolate, but generally have five pinnae, with the lower pair separate from the one next above by a wingless rhachis about 3–5 cm. long, pinnae are only 2.5–3 mm. broad, and the lowest generally furcate. In some form of *P. multifida* POIR., the fertile fronds associate with of our species, but are separable from our's by the distinctly winged rhachis.

113. *Pteris deltodon* BAKER in Journ. Bot. XXVI. 226 (1888); — CHRISTENSEN in Acta Hort. Gothob. I. 96 (1924); — HU & CHING, Ic. Fil. Sinic. I. 65, 66. pl. 32 (1930).

Pteris trifoliata CHRIST in Bull. Herb. Boiss. VII. 7 (1899), non Fée (1857).

Pteris nana CHRIST in CHRISTENSEN, Ind. Fil. 603 (1906).

Nom. Jap. Mituba-inomotosô, nom. nov.

Hab. Ryûkyû: Mt. Siro-yama, Isl. Ie-zima (S. TAWADA! No. 154. Dec. 30, 1934).

Distr. China: Yunnan, Kweichow, Szechuan, Kwangtung; Ryûkyû.

A new addition to the Flora of Japan!

摘 要

109. オホバノヒノキシダ、オホバノカウザキシダ

Asplenium trigonopterum Kunze は今日まで不明の種類であつたが、これは *Asplenium Mertensianum* Kunze の裸葉に附けた學名である。全面に囊堆を附けた實葉と囊堆を全く附けぬ裸葉とを比較すれば大變に異なるもののやうであるが中間型を示すものもあり、又囊堆を附けた上半は *A. Mertensianum* Kunze の記載に、囊堆を附けぬ下半は *A. trigonopterum* Kunze の記載に一致

するやうなものもある。ところが裸葉のほうが實葉よりも1頁さきに記載せられてゐるから好ましいことではないが本種の學名には *Asplenium trigonopterum* Kunze を採用することにしよう。小笠原島及び八丈島の特産である。

110. ホソバクロガネシダ (新稱)

臺灣の東岸、景勝の地として有名なタロコ峽の奥、セラオカとタビトとの間の石灰岩の絶壁上に発見した一小羊歯、クロガネシダ *Asplenium Toramanum* Makino によく似てゐるが葉は更に細く切れて3回乃至4回羽状に分裂して末次裂片には一脈あるのみ、囊堆を附けぬ裂片は線形で幅0.5耗、囊堆を附けた裂片は卵形で幅1耗ばかり、包膜は比較的幅廣く時に2耗以上もあるものでその端は裂片の外に出てゐることもある。今一つの大きな差は葉肉の細胞中葉緑粒を有するものの排列の模様である、即ちクロガネシダは葉緑粒を有する細胞は網状にならび、その直上の表皮細胞中には葉緑粒を有するものがあるので葉の表面を低度のレンズで見ると灰白の地に緑色の細點が澤山あるやうに見へる。これに反しホソバクロガネシダでは葉肉の細胞は一様に葉緑粒を持てゐるから全體一様に緑色に見へる。學名は *Asplenium calcicola* Tagawa と云ふ。

111. ホソバキノモトサウ (新稱)

テガタワラビ *Pteris daetylina* Hooker に比するに根莖の鱗片が長く、實葉は3乃至5個の狭長な羽片を有し、3個のときは掌状になつてゐる。臺灣臺中州の高地八通關と東埔との間の石灰岩の絶壁で発見した新種。學名を *Pteris angustipinna* Tagawa と云ふ。又大和の山上嶽から柏木に至る間の石灰岩上で小泉博士の発見せられたものはホソバキノモトサウによく似てゐるが裸葉の羽片の鋸齒が形を異にし、低平でもなければ内曲もしてゐないから變種として *Pteris angustipinna* Tagawa var. *yamatensis* Tagawa ヒメキノモトサウ と命名した。

112. リウキウキノモトサウ (新稱)

キノモトサウ *Pteris multifida* Poir. に比し實葉の中軸は無翼、裸葉は掌状に3乃至5個の羽片に羽裂してゐる。沖縄や徳之島にある。學名を *Pteris ryukyuensis* Tagawa と云ふ。

113. ミツバキノモトサウ (新稱)

オホバノキノモトサウ *Pteris cretica* L. に比し羽片は少數で通常3個、鋸齒の形も異り、側脈も疎である。雲南、四川、貴州、廣東にあり又沖縄の伊江島にある。學名を *Pteris deltodon* Baker と云ふ。