

Spicilegium Pteridographiae Asiae Orientalis 3

(Continued from Vol. I. No. 2. p. 161)

By

Motozi TAGAWA

Dryopteris Beddomei (BAKER) O. KUNTZE, Rev. Gen. Pl. II, p. 812 (1891);—ROSENBURGH, Malayan Ferns, p. 191 (1908);—HAYATA in Tokyo Bot. Mag. XXIII, p. 24 (1909); Mat. Fl. Formos. p. 415 (1911); Ic. Pl. Formos. IV, p. 151, fig. 91 (1914);—MATTHEW in Journ. Linn. Soc. XXXIX, p. 360 (1911);—MAKINO & NEMOTO, Fl. Jap. p. 1609 (1925); ed. 2, p. 59 (1931);—SASAKI, List Pl. Formos. p. 18 (1928);—OGATA, Ic. Fil. Jap. IV, pl. 167 (1931).

Nephrodium Beddomei BAKER, Syn. Fil. p. 267 (1867); in Journ. Bot. XXV, p. 171 (1887);—DIELS in ENGLER & PRANTL, Nat. Pflanzenfam. 1-4, p. 172 (1899); in ENGLER, Jahrb. XXIX, p. 189 (1901).

Nom. Jap. Hosoba-syorima.

Hab. Kyûsyû: prov. Hizen, Huditu-gun, Tara-mura (TASIRO-Z.); prov. Tusima, Kin-mura (HARA).

Distr. Southern India, Ceylon, Java, Philippines and Southern China.
A new addition to the Flora of Kyûsyû.

Dryopteris crassirhizoma NAKAI in Cat. Sem. et Spor. Hort. Bot. Univ. Imp. Tokyo, p. 32 (1920).

var. **setosa** (CHRIST) MIYABE & KUDO, Fl. Hokkaido & Saghalien, p. 15 (1930).

Dryopteris Filix-mas SCHOTT var. *setosa* CHRIST in Bull. Acad. Int. Géogr. Bot. 18^e année mémoires, p. 164 (1909).

Nom. Jap. Karahuto-menma.

Hab. Honsyû: prov. Kai, mt. Sirane-yama, Kita-dake, prope Sirane-oike (TAGAWA-M. no. 481).

A new addition to the Flora of Honsyû.

Dryopteris (Meniscium) **cuspidata** (BLUME) CHRIST in Philippine Journ. Sc. II, p. 205 (1907);—Christensen in Contrib. U. S. Nat. Herb. XXVI, p. 278 (1930).

Meniscium cuspidatum BLUME, Enum. Pl. Jav. p. 114 (1828); Fl. Jav. II, p. 102, tab. 45 (1828);—BEDDOME, Ferns Brit. Ind. II, tab. 309

(1869); Handb. Ferns Brit. Ind. p. 400 (1892);—HOOKER & BAKER, Syn. Fil. ed. 2, p. 392 (1874);—COPELAND, Polypodiac. Philipp. p. 33 (1905).

Phegopteris cuspidatum METTENIUS, Farng. IV, Phegopt. & Aspid. p. 25, no. 52 (1858);—ROSENBURGH, Malayan Ferns, p. 511 (1908).

Nom. Jap. Ô-kômorisida, nom. nov.

Hab. Ryûkyû: insl. Iriomote zima (DOI-Y. no. 46); insl. Okinawa, Kunzyan Sade (KOIDUMI-G.).

Distr. Northern India, Java and Philippines.

A new addition to the Flora of Japan.

The Japanese specimens are considerably different from the typical form by the much smaller frond and pinnae and the number of areolae (forma *minima* TAGAWA, in sched.), but I hesitate to describe ours as a variety. The diagnosis is as follows:—

Rhizome creeping, blackish. Stipes 20–35 cm. long, stout, blackish at the base, brownish above, naked. Frond 25–38 cm. long, 10–15 cm. broad, impari-pinnate, with gemma at the axil of a upper pinna. Pinnae 4–6 on each side of the rhachis, scattered, erect patent, short stalked or sessil, elliptic lanceolate, 8–12 cm. long, 2–2.5 cm. broad, caudate-acuminate, usually falcate at the end, cuneate at the base, nearly entire. Texture subcoriaceous; rhachis and both surface naked, dark green above with white or somewhat reddish dots marking the excurrent veinlets. Main veins prominent, areolae 5–7 between the midrib and the margine, each containing one free included steril veinlet. Sori round or oblong, in two rows between the main veins, the pairs mostly contiguous.

***Dryopteris purpurella* TAGAWA, sp. nov.**

Rhizoma ascendens. Stipites fasciculati 36–39 cm. longi, supra sulcati, purpurascens ad basin nigrescentes, squamati; squamis infimis lineari-lanceolatis caudato-acuminatis 5–9 mm. longis circiter 1 mm. latis, atro-fuscis margine fuscis, integris, squamis mediis filiformi-linearibus basi subcordatis circiter 5 mm. longis fuscis integris. Frondes in ambitu oblongae vel ovato-oblongae 25–40 cm. longae 20–25 cm. latae apice subito-acuminatae basi in ambitu rotundatae rigide chartaceae bipinnatae; rhachis frondum purpurascens supra sulcatis squamatis, squamis inferioribus filiformibus fuscis, squamis superioribus minoribus saccatis apice filiformibus ferrugineis. Pinnae utroque latere circiter 15, patentis, oblongo-lanceolatae 10–15 cm. longae 4 cm. latae apice acuminatae vel breviter caudato-acuminatae, basi truncatae latissimae, breviter petiolatae, petiolis 1–2 mm. longis; pinnis inferioribus suboppositis a se 5–7 cm. remotis, pinnis superioribus alternatis a se 3–4 cm. remotis; costis pinnarum stramineis ad basin purpurinis, supra sulcatis subtus squamatis,

squamis ferrugineis minoribus saccatis apice filiformibus. Pinnulae patentés alternatae, oblongae vel ovato-oblongae 2-3 cm. longae 5-8 mm. latae apice obtusae basi late cuneatae margine incurvato-arristato-serratae vel incisae (lobis oblongis vel quadrangularibus parce incurvato-arristatoserratis), supra glabrae virides, subtus pallide virides costis parcissime squamatae, squamis minimis saccatis apice filiformibus ferrugineis. Sori rotundati 1.5 mm. in diametro, medio costae et marginis pinnularum siti, indusiis reniformi-orbicularibus glabris.

Nom. Jap. Murasaki-benisida, nom. nov.

Hab. Kyûsyû: prov. Satuma, mt. Sibi-san (TASIRO-Z.—typus in Herb. Imp. Univ. Kyôto); prov. Ôsumi, mt. Takakuma-yama (TASIRO-Z.); prov. Ôsumi, insl. Yaku-sima (TASIRO-Z.).

Closely allied to *Dryopteris erythrosora* O. KUNTZE, but distinguishable from it by the fuscous-black scales and the purpurascens stipe and rhachis. The colour of juvenile indusia is unknown, but possibly reddish towards the centre.

Dryopteris tenuissima TAGAWA, sp. nov.

Rhizoma breve erectum, apice dense squamatum; squamis membranaceis ferrugineis lineari-lanceolatis medio constrictis 10 mm. longis 1 mm. latis apice filiforme acuminatis basi truncatis, acuminibus obscure remote serratis. Stipites caespitosi 5-11 cm. longi supra sulcati straminei, tota longitudine leviter pilo-glandulosi ad basin densissime squamati; squamis membranaceis ferrugineis, inferioribus ovatis vel lanceolatis 10 mm. longis 1-2 mm. latis apice filiforme acuminatis margine obscure serratis, mediis et superioribus lanceolatis vel linearibus 2-3 mm. longis $\frac{1}{2}$ -1 mm. latis apice filiforme acuminatis margine irregulariter serratis. Frondes oblongae 15-30 cm. longae 5-10 cm. latae medio latissimae apice acutae basi truncatae tenuissime membranaceae virides simpliciter pinnatae; pinnis utroque latere 10-15 patentibus a se 2-4 cm. remotis, oblongis 2.5-5 cm. longis 1-2 cm. latis apice obtusis vel acutiusculis basi latissimis truncatis vel subcordatis, sessilibus pinnatifidis; lobis approximatis oblongis apice rotundatis margine crenatis. Rhaches stramineae supra sulcatae leviter pilo-glandulosae parce squamatae. Sori utroque latere costae pinnae 1-seriatim dispositi, a costis pinnae 2 mm. remotae, comparate grandes; indusiis reniformibus 2 mm. latis stramineis glabris membranaceis margine integris.

Nom. Jap. Dairen-sida, nom. nov.

Hab. Manchuria: Dairen, Rankaton (*Talien, Luanchiatun*) (KOBAYASI-M.—typus in Herb. Imp. Univ. Kyôto); Dairen, Ryôsuwi-zi (*Talien, Lingshuissu*) (KOBAYASI-M.).

The very thin texture and the relatively large sori are noteworthy.

According to Mr. KOBAYASI-MASARU, this fern is found also growing at Daiosyô-zan in Kwantô-syû (*Tahoshan* in *Kwantung-chou*) in addition to the above mentioned localities, and the habitat is a damp rocky cliff or a shady place near by a rock.

Diplazium Wichurae DIELS in ENGLER & PRANTL, Nat. Pflanzenfam. 1-4, p. 226 (1899).

var. **amabile** TAGAWA, var. nov.

Diplazium japonicum var. *Oldhami* (non HOOKER) CHRIST in Bull. Herb. Boiss. (1901), p. 1015.

Diplazium japonicum (non BEDDOME) CHRIST ex MATSUMURA, Ind. Pl. Jap. I, p. 387 (1904).

Rhizoma repens parce squamatum; squamis lanceolatis 2 mm. longis 1 mm. latis acuminatis fuscescentibus membranaceis. Stipites remoti 6-7 cm. longi ad basin parce squamati; squamis lanceolatis 2-2.5 mm. longis 1 mm. latis apice acuminatis basi subcordatis vel truncatis fuscescentibus membranaceis. Frondes herbaceae, supra saturate virides subtus pallidiores, oblongae 14-15 cm. longae 3-3.5 cm. latae, apice attenuato-acuminatae (acuminibus linearibus serratis), simpliciter pinnatae. Pinnae utroque latere circiter 8; pinnis mediis longissimis, a rhachibus frondum angulo 50° divaricatis, a se 13-15 mm. remotis, oblique ovatis vel oblongo ovatis 20-25 mm. longis 8-10 mm. latis, apice obtusis, basi latere superiore subauriculatis, margine inaequaliter denticulatis, breviter petiolatis, petiolis 1-1.5 mm. longis; pinnis inferioribus plus minus gradatim brevioribus, a se 15-20 mm. remotis petiolatis, petiolis 2 mm. longis. Rhachis frondum glabrae. Sori medio inter costam et marginem utroque latere costae pinnae 1-serriatim dispositi oblongi vel lineari-oblongi 1-4 mm. longi $\frac{3}{4}$ -1 mm. lati plus minus falcati utroque ovati; indusiis integris membranaceis.

Nom. Jap. Hime-nokogirisida, nom. nov.

Hab. Kyûsyû: prov. Higo, Amakusa, Hukuregi (TANIYAMA-T.—typus in Herb. Imp. Univ. Kyôto); prov. Ôsumi, insl. Yaku-sima (FAURIE no. 4510); ibid. (SUGIMOTO-Z.).

This variety differs from *Diplazium Wichurae* DIELS by having the much smaller frond with obtuse and denticulated pinnae.

Asplenium Kobayashii TAGAWA, sp. nov.

Rhizoma breve erectum vel ascendente-erectum, apice squamatum; squamis cuspidato-lanceolatis vel lineari-lanceolatis, 2-2.5 mm. longis $\frac{1}{4}$ - $\frac{1}{2}$ mm. latis, apice caudato-acuminatis vel filiformibus, basi subcordato-rotundatis vel subtruncatis, margine integris, nigrescentibus. Stipites

caespitosi in apice rhizomatis circiter 4, 1-3 cm. longi, virides subtus inferne castanei, basi parce squamati; squamis minimis filiformibus. Frondes lineares vel lineari-lanceolatae 7-10 cm. longae 1-1.5 cm. latae apice acutae basi in ambitu obtusae, utroque virides, herbaceae, inferiore pinnatisectae, superiore pinnati-partitae, sursum lobatae, lobis gradatim versus summum ad serrulas abeuntibus. Lobis utroque latere 10-15 suboppositae supra glabrae infra parcissime pilo-glandulosae, cellulis pili uniserialibus 4 rare 3; lobis inferioribus late ovatis vel ovatis 5 mm. longis 4-5 mm. latis apice in ambitu rotundatis margine apiceque irregulariter minute serratis rarissime inciso-serratis latere superiore leviter auriculatis, a se 1 cm. remotis; lobis mediis ovatis vel oblongis 5-7 mm. longis 3-4 mm. latis apice obtusis margine superiore apiceque serratis inferiore subintegris vel plus minus crenatis, a se 5 mm. remotis; rhachibus utroque glabris viridibus elevatis tota longitudine alatis. Sori utroque latere costae loborum uni-seriatim dispositi, oblongi vel lineari-oblongi 1-2 mm. longi; indusiis membranaceis margine subintegris vel rarissime irregulariter minute dentatis.

Nom. Jap. Yamadori-toranowo, KOBAYASI.

Hab. Manchuria: Dairen, Midori-yama (*Lüshau* in *Talien*) (KURITAK.—typus in Herb. Imp. Univ. Kyôto).

According to Mr. KOBAYASI-MASARU this fern is found growing at a damp ground in the woods or on a shady rocky cliff, and in addition to the above mentioned locality, he added the following three others:—

Dairen, Hukasyô (*Fuchiachuan* in *Talien*),

Dairen, Ryôsuwizi (*Lingshuissu* in *Talien*),

Kwantô-syû, Bokuzyôsi (*Muchengtzu* in *Kuantugchou*).

I named in memory of Mr. KOBAYASI who gave me very kindly the excellent materials of this new species.

Asplenium viride HUDSON, *Flora anglica*, p. 385 (1762);—LEDEBOUR, *Fl. Ross.* IV, p. 521 (1853);—HOOKER & BAKER, *Syn. Fil.* p. 195 (1874);—LUERSSSEN in RABENHORST, *Kryptogamenflora*, III, p. 195 (1889);—DIELS in ENGLER & PRANTL, *Nat. Pflanzenfam.* 1-4, p. 235 (1899);—MAKINO in *Tokyo Bot. Mag.* XIX, p. 104 (1905);—GRAY, *New Manual of Botany*, ed. 7, p. 38 (1908);—BRITTON & BROWN, *Illustrated Flora of Northern States and Canada*, p. 28 (1913);—MAKINO & NEMOTO, *Fl. Jap.* p. 1585 (1925);—FOMIN, *Fl. Sibir. Orient. Extr.* p. 143 (1930).

Nom. Jap. Awo-tyasensida.

Hab. Saghalien: mt. Kasipo-zan (OHWI-J.).

Distr. Europe, Caucasus, Himalaya, Siberia, Japan (the alpine regions of the central part of Honsyû) and the temperate zone of North America.

A new addition to the Flora of Saghalien.

Adiantum capillus junosis RUPRECHT, Distr. Cr. vasc. Ross. p. 46 (1845);—MILDE in Bot. Zeit. (1867), p. 148;—HOOKER & BAKER, Syn. Fil. ed. 2, p. 114 (1874);—FRANCHET, Pl. David. I, p. 348 (1884);—DIELS in ENGLER & PRANTL, Nat. Pflanzenfam. 1-4, p. 283 (1899); in ENGLER, Jahrb. XXIX, p. 200 (1901);—HENRY, List. Pl. Formos. p. 116 (1896);—MATSUMURA, Ind. Pl. Jap. I, p. 284 (1904);—MATSUMURA & HAYATA, Enum. Pl. Formos. p. 615 (1906);—MAKINO & NEMOTO, Fl. Jap. p. 1572 (1925);—SASAKI, List. Pl. Formos. p. 6 (1928);—TAGAWA in Acta Phytotax. Geobot. I, p. 101 (1932).

Adiantum cantoniense HANCE in Ann. sc. nat. IV, XV, p. 229 (1861);—Hooker & Baker, Syn. Fil. ed. 1, p. 114 (1867).

Nom. Jap. Hôrai-kuzyaku.

Hab. Kyûsyû: prov. Bungo, Minamiamabe-gun, Nakano-mura, Konagara (Tashiro-Z.), et mt. Haki-yama (Tomihisa-H.).

Distr. China and Formosa.

A new addition to the Flora of Japan Proper.

(to be continued)

東亞羊齒植物考察 3

摘 要

田 川 基 二

ホソバシヨリマ *Dryopteris Beddomei* O. KUNTZE.

本種は南印度、セイロン、ジャバ、フィリッピン、南支那、臺灣に知られて居たが肥前國藤津郡多良村、對馬國琴村にも産することを知つた。ハシゴシダの羽片が下方に漸次縮小したやうなもの。緒方正贊氏の圖集第4巻第167圖を参照されよ。

カラフトメンマ *Dryopteris crassirhizoma* NAKAI var. *setosa* MIYABE & KUDO.

ヲシダの羽片裂片が鋸齒縁乃至稍缺刻狀鋸齒縁になつたもので、葉色も遙に美しい緑色のものである。従来樺太の特産と思はれてゐたが、今夏私はこれを甲斐國白根山北嶽に發見した。本州には新發見か。

オホカウモリシダ(新稱) *Dryopteris cuspidata* CHRIST.

カウモリシダ *Dryopteris triphylla* C. CHR. に似て遙に大形、尾狀鋭尖頭の羽片

が、五六對もあるもので、脈序にも差異を認る。ヒマラヤ、ジャバ、フィリピン等に産するものであるが、土井美夫氏は西表島に、小泉博士は沖縄國頭郡佐手に採集された。但し模範型に比するに、葉片並に羽片は頗る小さく、且つ areola の數も少い。多分最小の一型で、變種とする程のものでもあるまい。本邦には新発見の一種であるから、次に簡単に記載しやう。

根莖は匍匐、黒色。葉柄は 25—35 cm. 剛強、褐色、基脚黒色。葉片は 25—38×10—15 cm. 奇數羽狀複生、上部羽片の腋には珠芽のあることもある。羽片は 4—6 對、疎在、斜上開出、短柄又は無柄、橢圓狀披針形、8—12×2—2.5 cm. 尾狀銳尖頭、通常尖端部稍刀狀、楔脚、殆ど全縁、稍革質、羽軸及び兩面共に無毛、上面暗綠色、遊離細脈の先端部は上面に於て白色乃至稍帶赤色の斑點をなす。側脈は顯著脈間隙は中肋邊緣間に 5—7、各囊堆を有しない遊離小脈を入れる。囊堆は圓形乃至長橢圓形、側脈間に 2 列、對をなす囊堆は多く連續する。

ムラサキベニシダ (新稱) *Dryopteris purpurella* TAGAWA.

外觀頗るベニシダ *Dryopteris erythrosora* O. KUNTZE に似てゐるが、鱗片は全く黒色、葉柄及び羽軸は帶紫色なる點が異なる。羽片中軸及び小羽片中脈上に特異の囊狀小鱗片のあることはベニシダと變りはない。若い包膜はベニシダに於る如く、恐らく中心部は赤色を帯びるものと思はれる。薩摩國紫尾山、大隅國高隈山、屋久島等南九州の産。田代善太郎氏の採集である。

ダイレンシダ (新稱) *Dryopteris tenuissima* TAGAWA.

大連第一中學校の小林勝氏が、大連の樂家屯、凌水寺及び關東州大和尚山に發見された一新種である。

根莖は短小、直立し、鐵錆色膜質の線狀披針形鱗片を密生する。葉は叢生、葉柄は藁色、5—11 cm. 全體に微腺毛が散生し、上部は疎に下部は密に鐵錆色膜質の鱗片がある。葉片は長橢圓形、15—30×5—10 cm. 銳頭、截脚、薄膜質、單羽狀複生、羽片は長橢圓形、2.5—5×1—2 cm. 鈍頭、截脚、無柄、羽裂、裂片は長橢圓形、鈍鋸齒縁。囊堆は羽片中肋の兩側に一列、比較的大形で包膜は腎形、膜質。

小林氏によれば本種は濕潤なる岩崖又は岩側の蔭地に生ずと。

ヒメノコギリシダ (新稱) *Diplazium Wichurae* var. *amabile* TAGAWA.

ノコギリシダの小形の一變種である。葉柄は長さ 6—7 cm. 葉片は 14—15×3—3.5 cm. ばかりで、羽片は鈍頭、細齒牙縁なる點がノコギリシダと異なる。肥後國天草郡福連木で谷山民治氏の發見したものである。なほ屋久島にもある。

ヤマドリトラノヲ (小林) *Asplenium Kobayashii* TAGAWA.

本種は大連線山で発見された一新種である。

根莖は短小直立、先端有鱗、鱗片は披針形乃至線狀披針形、 $2-2.5 \times \frac{1}{2} - \frac{1}{4}$ mm. 先端は尾狀鋭尖又は糸狀、稍心臟狀圓脚又は殆ど截脚、全縁、黒色。葉柄は1-3 cm. 綠色基部背面は栗色、基部には微細な糸狀鱗片散生。葉片は線形乃至線狀披針形、 $7-10 \times 1-1.5$ cm. 鋭頭鈍脚、兩面共に綠色、草質、下部は羽狀全裂、上部は羽狀深裂、漸次鋸齒縁に移行する。裂片は各側10-15、稍對生、表面は平滑、裏面は極めて疎に腺毛がある、下部の裂片は廣卵形乃至卵形、 $5 \times 4-5$ mm. 圓頭、不整微鋸齒縁、稀に缺刻狀鋸齒縁、上側稍有耳、中部裂片は卵形乃至長橢圓形、 $5-7 \times 3-4$ mm. 鈍頭、上側鋸齒縁、下側は全縁又は稍鈍鋸齒縁。囊堆は裂片中脈の兩側に一列、長橢圓形乃至線狀長橢圓形、1-2 mm. 包膜は膜質、全縁稀に不整微鋸齒縁。

立派な標本を寄贈して下さつた小林勝氏を記念して上記の學名を附した。和名は小林氏の新稱。葉裏に囊堆の熟したときはヤマドリの尾羽によく似てゐるからだ。同氏の報告によれば、本種は濕潤なる樹林下又は日蔭に面せる岩崖に生じ、なほ大連の凌水寺、傳家庄及び關東州牧城子にも見ると。

アヲチャセンシダ *Asplenium viride* HUDSON.

本種はヨーロッパ、コーカサス、ヒマラヤ、シベリア、北米の温帶等に廣く分布し、本邦では1905年に牧野博士が白馬山産のものを報告されたのが最初であり、中部高山には所々知られてゐるが、今夏大井次三郎氏は樺太樫保山に採集された。樺太には新発見である。

ホウライクジャク *Adiantum capillus-junosis* RUPR.

本種に就てはすでに第1號101頁に記しておいた。富久福太郎氏は豊後國南海部郡中野村波木山でも発見された。