

Shunsuke SERIZAWA\*: **Taxonomical notes on Asian ferns (4)\*\***

芹沢俊介\*: アジア産シダ植物考察 (4)\*\*

14. **Dryopteris subexaltata** (Christ) C. Chr., Ind. Fil. 295 (1905); Hayata Mat. Fl. Formos. 418 (1911), Ic. Pl. Formos. 4: 182, fig. 120 (1914); Ogata, Ic. Fil. Jap. 2, tab. 75 (1929); Nakai, Bot. Mag. Tokyo 45: 101 (1931).

*Aspidium subexaltatum* Christ, Bull. Herb. Boiss. ser. 2, 4: 616 (1904).

*Dryopteris hayatai* Tagawa, Acta Phytotax. Geobot. 1: 156 (1932), Col. III. Jap. Pter. 97, 209, fig. 195 (1959); H. Ito, Bot. Mag. Tokyo 52: 587 (1938), in Nakai et Honda, Nova Fl. Jap. 4: 28 (1939); Ohwi, Fl. Jap. Pter. 84 (1957).

Distr. Japan (Isl. Hachijo and the southern-most parts of Shikoku and Kyushu), Ryukyu and Taiwan.

When Tagawa described *D. hayatai*, he noted that *D. subexaltata* is scarcely distinguishable from *D. sparsa*. However, *D. subexaltata* differs from *D. sparsa* in subulate or narrowly lanceolate and generally striped scales on the base of stipes, opposite basal pinnulae, and irregularly ripped indusia. These characters are common with those of *D. hayatai*.

On the other hand, the difference between *D. hayatai* and *D. subexaltata* is not clear. *D. hayatai* has broader pinnae with less number (6-8 pairs) of pinnulae and somewhat longer (5-12 mm long) stalks of the lowest pinnae, and this form is found in South-West Japan and the Ryukyu Islands. *D. subexaltata* has narrower pinnae with rather numerous (8-12 pairs) pinnulae and somewhat shorter (3.5-10 mm long) stalks of the lowest pinnae, and this form is found in Taiwan. However, intermediate forms are found in Isl. Iriomote of the Ryukyu Islands. This fact will support to consider *D. hayatai* to be conspecific with *D. subexaltata*.

15. **Dryopteris sparsa** (Don) O. Kuntze, Rev. Gen. Pl. 2: 813 (1891); Hayata, Mat. Fl. Formos. 422 (1911); Ogata, Ic. Fil. Jap. 6, tab. 270 (1935); Ching, Bull. Fan Mem. Inst. Biol. Bot. ser. 8: 470 (1938); H. Ito, Bot. Mag.

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Tokyo 52: 587 (1938), in Nakai et Honda, Nova Fl. Jap. 4: 29 (1939); Ohwi, Fl. Jap. Pter. 85 (1957); Tagawa, Col. Ill. Jap. Pter. 97, 203, fig. 196 (1959); Copel., Fern Fl. Phil. 283 (1960).

*Nephrodium sparsum* Don, Prod. Fl. Nepal. 6 (1825); Hook. et Bak., Syn. Fil. 276 (1867).

*Nephrodium viridescens* Baker in Hook. et Bak., Syn. Fil. 275 (1867).

*Dryopteris viridescens* O. Kuntze, Rev. Gen. Pl. 2: 814 (1891); Tagawa, Acta Phytotax. Geobot. 3: 43 (1934).

*Dryopteris sparsa* var. *viridescens* Ching, Bull. Fan Mem. Inst. Biol. Bot. ser. 8: 473 (1938).

var. **sparsa**

Distr. Himalaya to the Philippines, throughout South-East Asia, north to Japan, but rare in the Ryukyu Islands.

Although the Japanese plants named *Nephrodium viridescens* differs from the Himalayan materials in lanceolate and deciduous scales on the stipes, intermediate forms are found in the Ryukyu Islands (Isl. Ishigaki) and Taiwan.

var. **ryukyuensis** Serizawa, var. nov.

A typo differt laminis minoribus, pinnulis infimis oppositis.

Rhizoma crassum ascendens 1.5–2 cm crassum apice dense squamatum; squamis lanceolatis 7–13 mm longis 1–2 mm latis membranaceis, margine integris, pallido-brunneis concoloribus (raro medio indistincte subfuscatis). Stipes (5–)20–40 cm longus (0.5–)1.3–2 mm crassus viridi-stramineus, basi plus minus purpurascens squamatus, sursum parcissime squamatus vel glabrus. Lamina frondis ovata (7–)20–35(–50) cm longa (3–)10–17(–21) cm lata apice acuminata gradatim attenuata bipinnata; pinnis utrinque 4–6, suboppositis a se 2.5–7 cm remotis, infimis longissimis 7–13 cm longis, petiolis 3.5–9 mm longis, pinnulis utrinque 6–9, 1–3 paribus independentibus, infimis posterioribus longissimis 2–4.5 cm longis; pinnulis infimis pinnarum mediarum oppositis. Sori rotundati 1.2–1.5 mm lati, mediales.

Hab. Japan. Honshu: Mt. Ogasayama, Kakegawa-shi, Pref. Shizuoka (S. Serizawa no. 12178–85, Aug. 1970). Kyushu: Mt. Kishidake, Higashimatsura-gun, Pref. Saga (S. Serizawa no. 12909–10, Feb. 1971; Near Anbo, Isl. Yakushima, Pref. Kagoshima (S. Serizawa no. 12949–56, Feb. 1971); Tainoko (no. 13013, 13033–36); Mt. Motchomudake (no. 12978–84, 13005–07).

Ryukyu. Near Nishinakama, Isl. Amamioshima (S. Serizawa no. 11450, April 1970); The upper stream of Sumiyo-dam (no. 11548-55); Mt. Yuwandake (no. 11622-25); Hatsuno, Setouchi-machi (no. 11657-59); Kofukujidani, Sumiyo-mura (no. 11698—holotype in TNS, 11699-11704); Kinsakubaru (no. 11746); Mt. Yonahadake, Isl. Okinawa (S. Serizawa no. 13099, 13112-13, Feb. 1971, no. 13523-27, March 1971).

In general appearance, the present new variety is somewhat similar to, and sometimes confused with, *D. subexaltata*, but easily distinguishable from that species in lanceolate and pale brown scales on the base of stipes and scarcely ripped indusia. The habitat of var. *ryukyuensis* is also similar to that of *D. subexaltata* with which the present variety is growing side by side at the same places in Isl. Yakushima, Isl. Amami-oshima and Isl. Okinawa, and not concerned with that of var. *sparsa*.

16. ***Athyrium auriculatum*** Serizawa, sp. nov.

Valde simile *A. mearnsiano*, sed differt: pinnulis distincte orbiculato-auriculatis, pinnulis infimis pinnarum mediarum anadromis.

Rhizoma ignotum. Stipes 23-32 cm longus 2-3 mm crassus purpurascens, basi dense sursum parcellissime squamatus; squamis basalibus subulatis 7-10 mm longis 0.5-0.8 mm latis apice filiformi-acuminatis margine integris, sub-rigido-membranaceis, piceo-fuscis margine plerumque brunneis, squamis superioribus lanceolatis 2-4 mm longis brunneis concoloribus. Lamina frondis ovata vel subdeltoideo-ovata 33-45 cm longa 22-30 cm lata apice gradatim caudato-acuminata, chartaceo-herbacea, bipinnata; pinnis utrinque 8-9, pinnis inferioribus a se 3-6 cm remotis, lanceolatis 11-20 cm longis 2.4-5 cm latis, apice caudato-acuminatis a medio usque ad basim aequilatis, basi latissime cuneatis vel truncatis breviter petiolatis, petiolis 1.5-3.5 mm longis, pinnis infimis plus minus decrescentibus; costis pinnarum glabris, purpurascens, supra sulcatis, deorsum non-vel indistincte setuligeris, sursum distincte setuligeris; pinnulis pinnarum inferiorum utrinque 13-20, a se 5-13 mm remotis, infimis anadromis, pinnatisectis plus minus longioribus quam ceteris, pinnulis ceteris ovato-oblongis 1.2-2.5 cm longis 0.6-1.5 cm latis pinnatifidis vel pinnatipartitis, apice obtusis vel rotundatis basi anteriore latissime cuneatis vel truncatis vel subcordatis distincte orbiculato-auriculatis posteriore cuneatis, brevissime petiolulatis. Sori utroque latere secus costulas pinnularum (et plerumque auricularum, rare segmentorum)

uniseriatim siti; indusiis plerumque asplenoideis, rare athyrioideis vel diplazioideis mixtis, membranaceis 2-3.5 mm longis, pallido-brunneis, margine subintegriss.

Hab. Taiwan. Terng-jy (Fujieda), Liowguei-Shiang, Pref. Kao-hsiung, (S. Daigobo no. 634, Aug 1970—holotype in TNS; no. 635).

The present new species is easily distinguishable from all the other species of the *Athyrium otophorum* complex of Japan and Taiwan in large roundish auricles of the pinnulae and anadromously arranged basal pinnulae.

17. *Athyrium* × *purpurascens* (Tagawa) Kurata, Journ. Geobot. 14: 4 (1965).

*Athyrium elegans* var. *purpurascens* Tagawa, Acta Phytotax. Geobot. 3: 33 (1934).

*Athyrium subrigescens* var. *purpurascens* Kurata, Sci. Rep. Yokosuka City Mus. no. 6: 21 (1961).

Hab. Taiwan. Nan-hu-ta-shan (Nankotaisan), Pref. I-lan, (C. C. Chuang and M. T. Kao no. 2552, Jan. 1964, TOFO; S. Daigobo no. 751, Sept. 1970, TNS).

Already known from Japan (Kyushu).

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(14) 台湾の *Dryopteris subexaltata* はイスタマシダに比べて羽片が細く、柄が短く、小羽片が多く、一見したところナガバノイタチシダに似た感じも受けるが、包膜、鱗片、小羽片の配列等、重要な形質はイスタマシダと一致する。西表島ではしばしばどちらともつかない型が見られるから、結局両者は同じものであろう。

(15) 日本のナガバノイタチシダは、ヒマラヤのものに比べて鱗片が細く、葉柄基部を除き落ちやすい点で異なり、また葉質や小羽片の形状にも多小の差が認められるが、石垣島や台湾には中間的な型もあり、両者を区別する必要はないものと思われる。

一方屋久島、奄美大島、沖縄島などには、小形で中部羽片の最下小羽片はほぼ対生し、時にイスタマシダと混同されている一型がある。生態的には沢沿いの崖状の所に多く、しばしばイスタマシダと混生している。同じものは静岡県小笠山や佐賀県岸岳にもあるが、これらの場所では林床に生ずる普通のナガバノイタチシダとは棲み分けている。この型をリュウキュウイタチシダ *Dryopters sparsa* var. *ryukyuensis* と命名した。真のナガバノイタチシダは琉球列島には少ない。

(16) *Athyrium auriculatum* は大悟法滋氏が台湾高雄縣藤枝で採集したタニエヌワラビ類の一種で、カラクサイヌワラビ状の大きく丸い小羽片の耳垂と、上先きに配

れた最下小羽片が、よい特徴である。

(17) ムラサキオトメイヌワラビはツクシイヌワラビとホウライイヌワラビの雑種と推定されるもので、従来九州から知られていただけであるが、台湾の南湖大山にもある。台湾にはアリサイヌワラビとホウライイヌワラビの雑種と推定されるもの(例えば田川基二 No. 771, KYO や中村武久 No. 702, TOFO)もあるが、本雑種との区別は難しい。

○クロカミシライトソウ (新変種) (原 寛) Hiroshi HARA: *Chionographis japonica* var. *kurokamiana* Hara

佐賀県黒髪山に産するシライトソウの一品はシライトソウとチャボシライトソウのやや中間の形質を示し、後者にいれられたこともあった。昨春馬場胤義氏は同山を訪れて十分な資料を送付され、同地のものはすべて同じ安定した形質をもっていることを確かめられたのでここにシライトソウの新変種クロカミシライトソウ(新称)として発表する。標本で見ると花被片の細い点が目立ちチャボシライトソウに近いように思われるが、生品では花被片が白色で先端がわずかに太まり葯も2室になっているものが多く、シライトソウに近縁である。

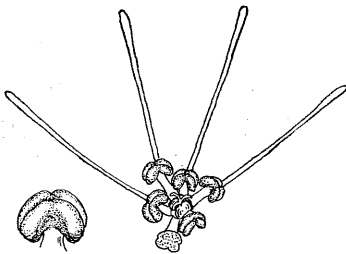


Fig. 1. A flower ( $\times 3$ ) and an anther (mag.).

*Chionographis japonica* (Willd.) Maxim.

var. *kurokamiana* Hara, var. nov. (Fig. 1)

Differt a typo tepalis filiformibus 4-12 mm longis albis apice leviter incrassatis ca. 0.3 mm latis et loculis antherae apice interdum confluentibus.

Typus. Kyushu: Chimachibô in monte Kurokami, Saga pref. (T. Baba, Mai. 24, 1970 in TI).

The plant here described shows somewhat intermediate characters between *C. japonica* and *C. Koidzumiana*. So in my revision of the genus (in Journ. Jap. Bot. 43: 257, 1968), I cited the specimen under *C. Koidzumiana* but made a note on p. 262 under *C. japonica*. This variety is endemic to Mt. Kurokami where is isolated from other localities of *C. japonica*.