Hideaki OHBA*: *Hydrangea serrata* (Thunb. ex Murray) Ser. var. *Minamitanii* from Kyushu, Japan. Studies of *Hydrangea* (1)

大場秀章*: アジサイ属の研究（1）ヒュウガアジサイ（新変種）

Several local forms have been recognized in *Hydrangea serrata* (Thunb. ex Murray) Ser. in Japan. One of them, named here var. *Minamitanii* (Fig. 1), is distinguished from the typical form, var. *serrata*, by persistent clumps of dense stiff hairs at axils of the lateral veins on the lower surface of leaves (Figs. 2a & c), glabrous nature of the branches and petioles and shining deep green leaves on upper surface. Though such clump of hairs at the axils is sometimes found in var. *serrata*, the surface of hairs is smooth in var. *Minamitanii* but it is roughly tuberculate in var. *serrata* (Fig. 2b).

Var. *Minamitanii* is found in Kyushu Mountain Range lying in Oita and Miyazaki Prefectures, central Kyushu (Fig. 3), where several representative taxa of so-called Sohayaki floristic elements are known to occur. In the type site this grows sympatrically with var. *serrata*, and seems to prefer rocky banks with little soil or cliffs (sometimes with waterfall) but var. *serrata* occurs on slopes under trees with rather rich soil.

I dedicate this new variety in honour of Mr. Tadasi Minamitani, who has contributed to the flora of Miyazaki Prefecture and found this *Hydrangea*.

Hydrangea serrata (Thunb. ex Murray) Ser. var. **Minamitanii** H. Ohba, var. nov.

A var. *serrata* differt: foliis infra pilis rigidis rectis laevibus ad venarum lateralium axilas dense ornatis, supra glabris nitidis atrovirentibus, ramis petiolisque glabris bene differt.

Deciduous shrub 0.8–1.5 m long, with ascending to decumbent or rarely descending branches of (2–)3–7(–10) mm across; annotinous branches usually bent with fistulous pith (ca 2 mm across), the bark brownish, often fissured; hornotious branches terete, glabrous, with (3–)4–5 pairs of leaves.

Leaves when young conduplicate, petiolate. The petioles 1.5–3(–4) cm long,

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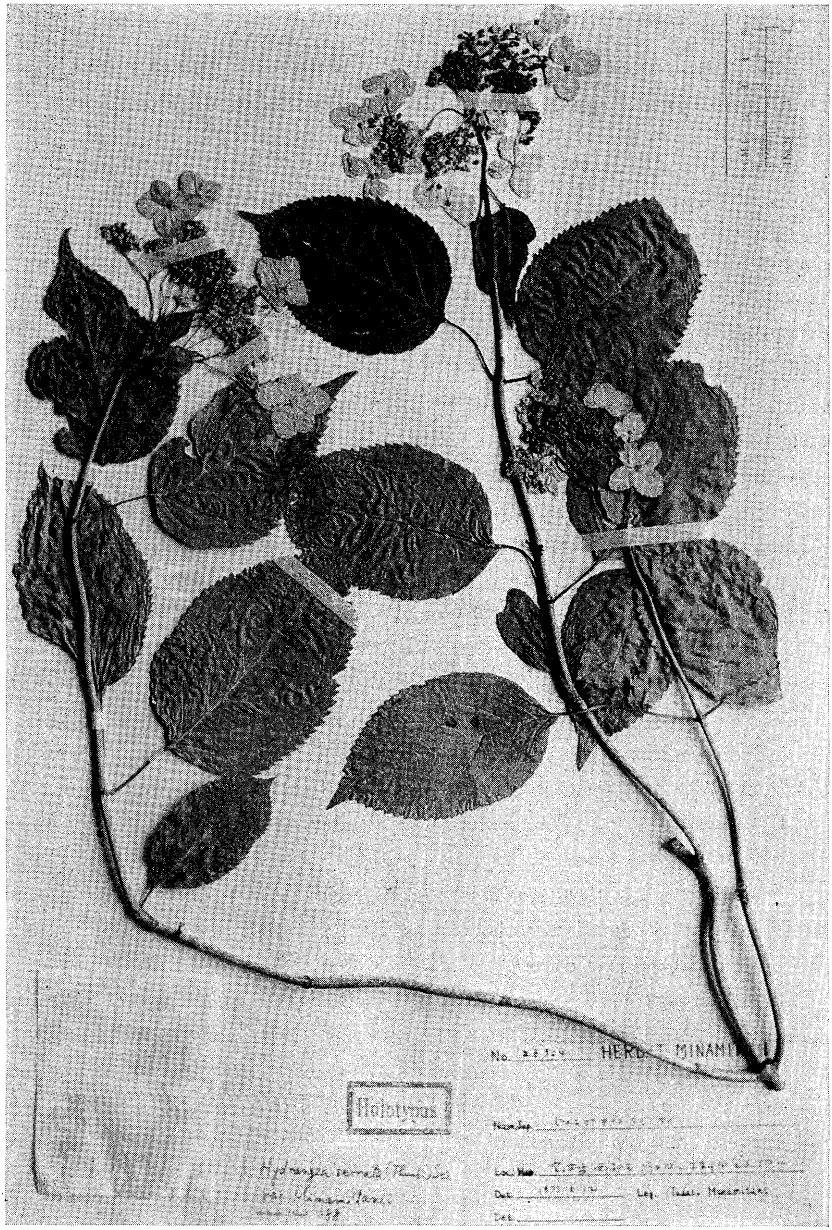

Fig. 1. Type of *Hydrangea serrata* var. *Minamitanii*.

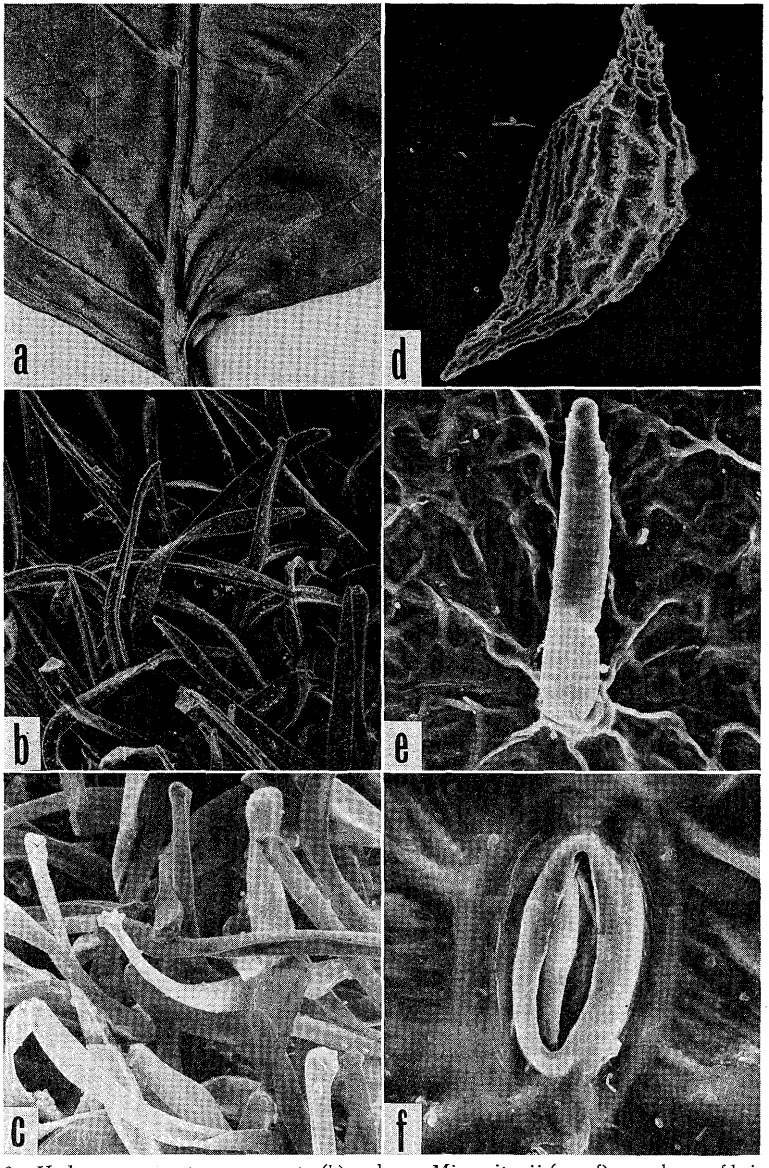

Fig. 2. *Hydrangea serrata* var. *serrata* (b) and var. *Minamitanii* (a, c–f). a. clump of hairs at the axils of lateral veins on the lower surface of leaf, ×1.5. b & c. hairs at the axils in var. *serrata* (b) and var. *Minamitanii* (c), ×80 (b) & ×180 (c). d. seed, ×70. e. a unicellular hair on the upper surface of leaf, ×450. f. stoma, ×1600.

terete, glabrous or nearly glabrous, with somewhat swollen base. The lamina chartaceous, more or less variable in shape, usually broadly oblong to oblong, oblanceolate to obovate, acuminate to acuminately acute at apex, round to roundly truncate or shortly attenuate at base, 7–13 cm long, 2.5–7 cm wide, rather regularly serrate throughout; the teeth triangular 1–2 mm long, straight in upper side, curved in lower side, with small mucro, the sinus between teeth round or acute; midrib and lateral veinlets raised beneath, shining, deep green, without stoma, when young sparsely pilose on veins but later glabrescent on upper surface; the lower surface stomatophorous (stoma elliptic, Fig. 2f), except the axils of veinlets glabrous or very sparsely pilose on veins, hairs unicellular, smooth (Fig. 2e); the hairs at the axils of veinlets on the lower surface very dense, unicellular, simple, white, glassy, ca 0.5 mm long, round at apex smooth on surface.

Inflorescences flat-topped, terminate at hornotious branches, compound, 4 or 5 lateral axes with three clusters of flowers, one of which terminated in an ornamental flower; axes densely pilose. Ornamental flowers terminal with 4–5 broadly ovate round apexed white or pinkish petaloid sepals of 15 to 25× 9 to 20 mm in size, and normal petals, stamens and pistils. Normal flowers congest; hypanthium 1.2–1.5 mm long, glabrous. Calyx-lobes triangular, ca 0.5 mm long, spreading. Petals oblong, round at apex, caducous, reflexed before falling, 1.6–1.9 mm long, ca 0.8 mm wide, white or pale blue. Stamens 10, longer than the petal, filaments 5–7 mm long, pinkish, anthers ovate, basifixed, ca 0.5 mm long, blue before dehiscence. Ovary half-inferior. Styles 3, ca 1 mm long at male stage; in female stage 1.5–2 mm, erect, stigma capitate. Seeds (Fig. 2d) fusiform, ca 1.3 mm long, testa brownish, foveate and reticulate with sinuate ridges.

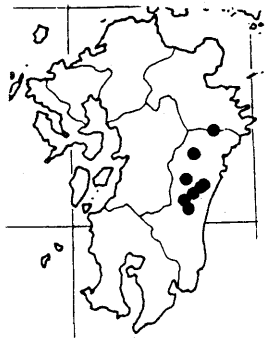

Fig. 3. Distribution map of *Hydrangea serrata* var. *Minamitanii* in Kyushu, Japan.

Specimens examined. Japan. Kyushu. Oita Pref., Minami-Amabe-gun, Mt. Okue-yama, N side, Kiura Mine (T. Minamitani 24079, TI). Miyazaki Pref.: Mt. Osuzu (Sako 2549 & 3285, KAG); Koyu-gun, Tsuno-cho, Mt. Osuzu-yama, alt. 600 m (Minamitani 22589, TI); loc. cit., alt. 500 m (Minamitani

22630, TI, KAG as *Hydrangea macrophylla* var. *acuminata* subvar. *lucida* Hatusima, var. nov.); loc. cit., Amachadani, alt. 480 m (Ohba, Akiyama & Minamitani 8610003, TI); Higashi-Usuki-gun, Siiba-mura, Okawauti (Minamitani 24867, KAG); Nango-mura, Kamidogawa, Kashiba, alt. 500 m (Minamitani 26671, TI); Nishi-Usuki-gun, Hinokage-cho, Mitate-Keikoku, alt. 550 m (Minamitani 22478, TI); Saito-shi, Ginkyougawa, Kawanokuchi—Yokohira, alt. 350 m (Tadasi Minamitani 12 June 1977, no. 26304, TI—holotype; 26277 & 26278, TI); Ginkyougawa, Kawanokuchi, alt. 350 m (Minamitani 26277, TI); Sanzai, Samukawa, alt. 200 m (Minamitani 26232 & 28233, TI); Mera route, Sugiyasu—Jugoban, alt. 80 m (Minamitani 26241, TI).

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宮崎県の植物相を調べておられる南谷忠志氏は以前から変わったアジサイが県内に分布しているのに気づかれていた。初島住彦博士はこれに *Hydrangea macrophylla* var. *acuminata* subvar. *lucida* オニサワアジサイという手記名を与えたが正式には発表されなかった。このアジサイの標本を最初に鹿児島大学で見たときに葉裏面は脈腋の毛があるほか無毛であることを知ったが，ヤマアジサイにも同様な毛が出る個体があり，特に四国には多いので，ヤマアジサイの変異に含まれるものではないかと考えた。その後，走査型電子顕微鏡でアジサイ属の微細構造を調べた折，問題の毛がヤマアジサイでは表面にいぼ状突起があるのにたいして宮崎県産のものは滑らかであることが判明した。他にヤマアジサイと異なる点は葉柄や当年枝が無毛であることである。すでに大分県からも採集されており，宮崎県に特産するわけではないが，同県に多いことからヒュウガアジサイという和名を南谷氏が提唱した。ヤマアジサイは地方変異に富んでいるが，その全貌はまだ判っていない。

□渡辺定路：**福井県植物誌** 416 pp. 1989. 自費出版（福井市松本 4-3-25）. 著者の長年の採集品と福井県立郷土科学博物館所蔵の標本に基づく目録。ほとんどがご自分の採集品のようで，標本の引用は産地と標本番号のみでなされている。欲をいうと採集日時があれば変遷をたどる資料としてさらに良かったのにと思う。（金井弘夫）