

Sumihiko HATUSIMA*: On the Genus *Sida* from the Ryukyus

初島住彦*: 琉球のキンゴジカ属について

In my "Flora of Okinawa" I have enumerated four species of *Sida* in the Ryukyus, i.e. *S. acuta*, *S. retusa*, *S. spinosa*, and *S. rhombifolia*. However, after examining the specimens preserved in the herbarium of the Kagoshima University I came to the conclusion that five species of *Sida* occur in the Ryukyus of which one is new. *S. retusa* and *S. spinosa* var. *angustifolia* are recent introduction in Okinawa after the II Great War, and *S. acuta* and *S. rhombifolia* which are Old World pantropic seem to be introduced in the relatively recent century. *S. insularis*, a newly described species which has been referred to *S. rhombifolia* is a common suffrutescent perennial apparently indigeneous to the Ryukyus and Formosa.

Analytical key to the species.

- A. Leaves hoary beneath.
- B. Stem diffuse or procumbent.
- C. Leaves cuneate-obovate retuse or truncate at the apices, usually about 1 cm. long.*S. retusa*
- CC. Leaves rhomboid-lanceolate or rhomboid-ovate, obtuse at the apices, 1-4.5 cm. long.*S. insularis*
- BB. Stem erect and taller; leaves oblanceolate to rhomboid-obovate, usually broadest at or above the middle, about 2-5 cm. long.*S. rhombifolia*
- AA. Leaves not hoary beneath.
- B. Suffrutescent perennial; stipules conspicuous about 1 cm. long; petioles less than 5 mm. long, without spines.*S. acuta*
- BB. An annual herb; stipules less than 5 mm. long; petioles 1-2 cm. long, with recurved spines at its base.*S. spinosa* var. *angustifolia*
- Sida retusa* L., Sp. Pl. ed. 2 (1763) 961; Hatsushima in Journ., Jap. Bot. 27 (1952) 210; Masamune, Enum. Tracheophyt. Ryukyu Insl. 6 (1955) 2; Hatsusima et Amano, Fl. Okinawa (1958) 66.**
- Sida rhombifolia* var. *retusa* Mast. in Hook. f., Brit. Ind. 5 (1874) 324.
- Hab. Isl. Okinawa: Naha city, T. Amano 7828, 6797, Oct. 1951.
- Distr. India to Malayasia.

Sida rhombifolia L., Sp. Pl. (1753) 684; Merr., Enum. Philip. Fl. Pl. **3** (1923) 35; Ohwi, Fl. Jap. (1952) 769; Walker et al., Fl. Okinawa (1952) 100; Hara,

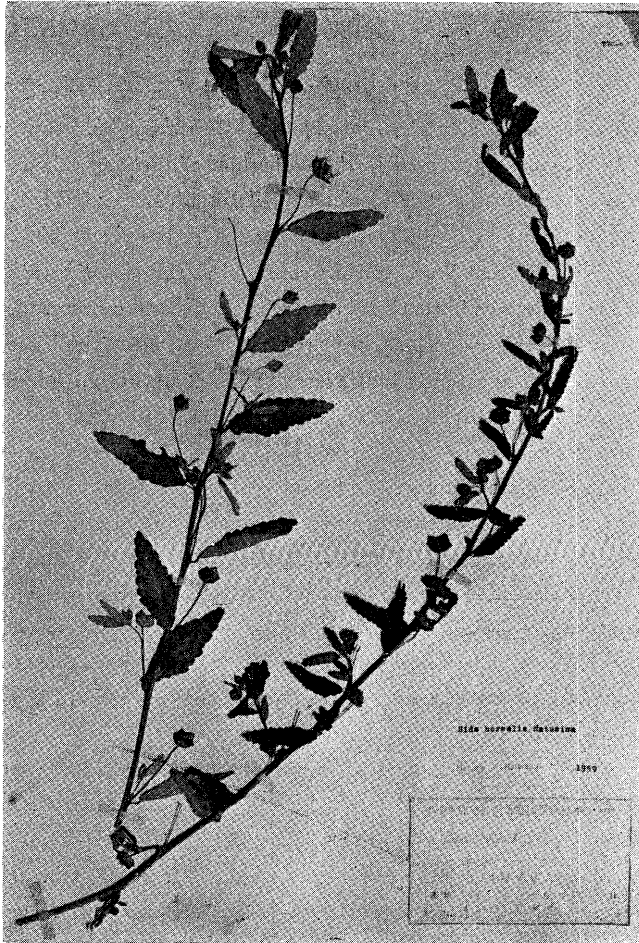


Fig. 1. *Sida insularis* Hatushima (type).

Enum. Spermatophyt. Jap. **3** (1954) 150; Masamune, l.c. 2, p.p.; Hatsushima et Amano, l.c. 66, pp.

Hab. Isl. Ishigaki: Yonehara, alt. 50 m., along roadside, a frequent shrub 1-1.5 m. ht., S. Hatsushima 22985; near Tomino, S. Hatsushima 18324; without precise locality, Y. Ohno 2266. Isl. Okinawa: Urazoe, Shimajiri, S. Hatsushima 17480;

Hanezimura, Kunigami, S. Kawagoe, Aug. 1913; ruin of castle Iha, M. Yamashiro, July 1959.

Distr. pantropic.

Sida insularis Hatusima, sp. nov. (fig. 1.)

'*Sida rhombifolia* L.': Ito et Matsumura, Tent. Fl. Lutch. (1900) 334; Walker et al., l.c. 100, pro maj. part.; Masamune, l. c. 2, pro maj. part.; Hatusima et Amano, l. c. 66, pro maj. part.

Frutex diffusus circ. 10–50 cm. altus, ramuli stellato-tomentelli. Folia rhomboid-lanceolata ad rhomboid-ovata, rarius oblongo-lanceolata, circ. 1–4.5 cm. longa, 0.6–1.5 cm. lata, plerumque infra medium latissima, apice obtusa basi cuneato-obtusa vel rotundata, margine grosse crenato-serrata, supra sparse stellato-pilosa viridis, subtus griseo-stellato-tomentosa, nervis lateralibus utrinsecus 4–5, tenuis, stipulis subulatis circ. 2–3 mm. longis. Petioli 2–3 mm longi stellato-tomentelli. Flores axillares solitarii, pedunculi 1–2.5 mm. longi circ. 0.5 mm. crassi ad supra circ. 2/3 articulati, stellato-tomentelli; calyx 5-lobatus 6–8 mm. latus, lobis triangularis circ. 4 mm. longis apice acutis dorso stellato-pubescentis; corolla aurescens circ. 1 cm. in diam. basi columnae staminum adhaerentia, petala 5, subrotundata, columnae staminum circ. 4 mm longa. Ovarium ovoideum circ. 1 mm. longum apice stellato-pilosum, carpella circ. 1.5 mm. longa supra medium stellato-pubescentis apice biaristata, aristis strictis circ. 1.5 mm. longis. Semina reniformia circ. 2 mm. longa glabra nigrescens.

Hab. Formosa. Garanpi: Kōsyun, S. Kawagoe, Aug. 7, 1914; Keelung, S. Suzuki, July 31, 1927. Ryukyus. Isl. Yonakuni, S. Hatusima 24206, 24207, Nov. 1959; Isl. Ishigaki: Nozoko, S. Hatushima 22994; along open roadside, flowers orange-red, H. Walker et S. Tawada 7291; Isl. Iriomote: Funauki, S. Hatusima 24004; Isl. Okinawa: Sade, T. Naito, July 1938; Shuri, Naha city, alt. 80 m., common, shrub 30 cm. ht., fls. yellow, S. Hatushima 17336; Isl. Rasa, S. Kawagoe, Oct. 1916; Isl. Okierabu: Wadamari, K. Uehara, Aug. 1920; a frequent diffuse shrub on the roadside near Shimajiri, alt. 20 m., S. Hatusima et S. Sako 21649; Isl. Tokunoshima: a frequent diffuse shrub 50 cm. ht., near Boma, alt. 100 m., S. Hatusima 19371; without precise locality, Y. Hosoyamada, Aug. 1927; Isl. Amami-oshima: Nase, S. Kawagoe, July 1919; S. Hatusima 20321; Uken, H. Noguchi 3366; Taken, alt. 10 m., H. Noguchi 3220; Akakina, S. Sako, Nov. 1956; Nishinakama, alt. 20 m., common, S. Hatusima 19907; without precise locality, T. Naito, Aug. 1927; Isl. Kikai: on the roadside, a shrub 30 cm. ht., S. Hatusima et S. Sako

23788A; without precise locality, S. Ouchiyama 93, Aug. 1956; Tokara Islands: Isl. Kakarajima, Hurukawa, Aug. 1910 (**type**); Isl. Nakanoshima, S. Sako et K. Kawanabe 2045; Isl. Tanegashima: Shimajiri, S. Hatusima 13695, Aug. 1949; without precise locality, T. Naito.

Distr. Endemic.

Sida acuta Burm. f., Fl. Ind. (1768) 47; Merr., l.c. 33; Walker et al., l.c. 100; Masamune, l.c. 2; Hatusima et Amano, l.c. 66.

Hab. Isl. Okinawa: Izumi, S. Sonohara, May 20, 1955.

Distr. Pantropic.

Sida spinosa var. **angustifolia** (Lam.) Grieseb., Fl. Brit. W. Ind. (1859) 74. *Sida angustifolia* Lam., Encycl. 1 (1783) 4.

'*Sida spinosa* L.': Hatusima et Amano, l.c. 66.

Hab. Isl. Okinawa: Naha city, T. Amano 6116, Aug. 20, 1950; Isl. Tokunoshima: Shikaura, alt. 50m., S. Hatusima 19453; Isl. Amami-oshima: Nase city, S. Hatusima 19629, Aug. 26, 1955.

Distr. An introduced weed of tropical American origin.

拙著沖繩植物目録(1958)にはキンゴジカ類としてホソバキンゴジカ・ヤハズキンゴジカ・アメリカキンゴジカ・キンゴジカの4種を報じたが其後研究の結果結局5種産することが判った。その中従来琉球列島でキンゴジカと称していたものは、真のキンゴジカとは莖が直立せず匍匐性又は伏臥性となり葉形を異にした別な1新種なることが判ったので、これにハイキンゴジカ(*S. insularis* Hatusima)なる新名をつけることにした。この型のキンゴジカは北は種子島からトカラ列島を通り、南は与那国から台湾の南端に及び、極めて普通で明かに固有種である。これに反し真のキンゴジカは莖は真直に立ち高さは1-1.5米となるもので、琉球列島では沖繩本島及び石垣島に産するのが沖繩では極めて稀で明かに近世紀における帰化品と思はれる。この型のものは日本内地にも帰化している。尚アメリカキンゴジカは終戦後帰化したものである。