

***H. kikutii* var. *yakusimensis* (Masamune) F. Maek.**

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ヒメヒョウガギボウシ = 姫日向擬宝珠 = Hime Hyūga (≈ small Hyūga) Gibōshi

History, Nomenclature and Habitat: The *H. kikutii* complex is widespread and shows distinct local phenotypes. Among these are smaller forms with narrow leaves, which distinguishes them from *forma typica* of *H. kikutii* var. *kikutii*. It is also differentiated by the number of principal veins, scape posture and length. populations. This variety is well known in Japan and has been cultivated there under its Japanese name ヒメヒョウガギボウシ (= Hime Hyūga Gibōshi), given by F. Maekawa in 1940. The transliterated Japanese name translates to “small hosta from Hyūga.” Although the name Hyūga Gibōshi alludes to the old province of Hyūga-no kuni (日向国) in western Kyūshū (九州), where the type of *kikutii* var. *kikutii* was found, *H. kikutii* var. *yakusimensis* originates further south. Named for Yakushima Island, its habitat spreads over northern Satsunan Islands locations (薩南諸島) in the Ōsumi shotō (大隅諸島) island group. Located at the southern tip of the Japanese



***H. kikutii* var. *yakusimensis* (cult.) Bud initial development**
Hosta Hill R.G. © W.G. Schmid 1985.07.23
HH10498308 1983 Vouch. Loc. cit.: Yakushima (屋久島 大隅諸島)



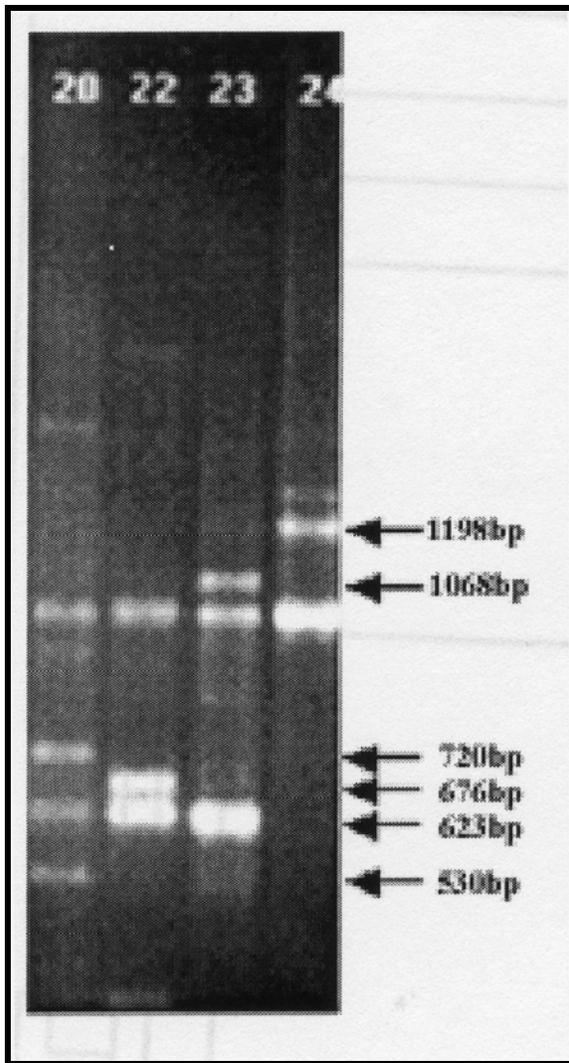
H. kikutii* var. *yakusimensis

Hosta Hill R.G. © W.G. Schmid HH10498308 1983 Vouch. Mid to late August

Loc. cit.: Yakushima, Ōsumi shotō (屋久島 大隅諸島)

archipelago, the Ōsumi shotō includes the islands of Tanegashima (種子島; 446 sq. km/172 sq. miles) and Yakushima (屋久島; 503 sq. km/ 194 sq. miles) on which the warm, subtropical climate fosters rich vegetation. The type specimen of *H. kikutii* var. *yakusimensis* is in TI (No. 103), collected by Suzuki on Yakushima Island (屋久島). This island is also the southern habitat of *H. kikutii* f. *leuconota* Schmid (1991), which see. Sporadically, this taxon ranges north to Ehime-ken (愛媛県) on Shikoku Island (四国). One of the types recorded by Maekawa is from Yokogurazan (横倉山) in Kōchi-ken (高知県; former Tosano-kuni; 土佐国), Takaoka-gun (高岡郡) near Ochi-chō (越知町), where several populations were observed. *H. kikutii* var. *yakusimensis* has lanceolate leaves with 5–8 (9) pairs of principal veins. The leaf length also varies considerably. Also variable are the leaf margins, which can be straight or undulate. It should be noted that these variations are common within all *H. kikutii* populations.

Plant Morphology: Note: The description below is average for this varietas. *H. kikutii* var. *yakusimensis* is polymorphic and shows macromorphological differences in its natural populations. Variants have lanceolate leaves with 5–8 (9) pairs of principal veins. Petiole/leaf transition is decurrent to the petiole and leaf length varies. Leaf margins can be straight or undulate. In most individuals, the flower morphology is very uniform.



◀ Fig A: DNA Banding Pattern

20 = *H. kikutii* var. *kikutii*

22 = *H. kikutii* var. *caput avis* (*H. kikutii* var. *tosana*)

23 = *H. kikutii* var. *polyneuron*

24 = *H. kikutii* var. *yakusimensis* (*H. kikutii* var. *kikutii* f. *leuconota* is considered a morph).

DNA Banding: Recent RAPD analysis (Y. Yu, 2002; Sauve, R.J., S. Zhou, Y. Yu, and W.G. Schmid. 2005) has established the banding patterns of four closely related *H. kikutii* species accessions in section Rynchophorae (See Fig. A). The banding pattern illustrated in Fig. A shows comparison using a single primer OPB-02 = (5'-TGATCCCTGG-3') and the species were differentiated with the single primer OPB-02 and *H. kikutii* var. *yakusimensis* is therefore considered a distinct infraspecific taxon in section Rynchophorae.

H. kikutii ▶▶▶
 var. *yakusimensis*
 Elongating scapes
 with bud initials
 Hosta Hill R.G.
 © W.G. Schmid
 HH10498308 1983
 Loc. cit.: Yakushima
 (屋久島 大隅諸島)



Taxonomic Type and Synonymy:

H. kikutii var. *yakusimensis* (Masamune) F. Maek.

Journal of the Faculty of Science, Imperial University of Tokyo, Section 3 Botany, Vol. 5:374, 375, 376, ic. 42. 43, 44 1940.

Type.: Coll. Suzuki pl. Hortus Maekawa No. 103; et. T. Yoshinaga in Hortus Kikuchi; loc. cit.: Yokogurazan (横倉山), Kōchi-ken (高知県; former Tosano-kuni; 土佐国), Takaoka-gun (高岡郡) near Ochi-chō (越知町).

Hab.: Southern Kyūshū region (九州地方, Kyūshū-chihō) in Kagoshima-ken and northern Satsunan Islands (薩南諸島) location in the Ōsumi shotō (大隅諸島) island group and on Shikoku Island (四国) in Kōchi-ken (高知県) and Ehime-ken (愛媛県), Japan; in shady forests and sub-montane areas in flooding river valleys and rocky banks, occasionally wet montane soils with rocky base.

Botanical Synonyms:

Included here are references to *H. sieboldiana* var. *yakusimensis* Masamune: *J. Society of Tropical Agriculture*, 4:301 1932, which is used by Maekawa (1940) as the basionym for *H. kikutii* var. *yakusimensis*; as pointed out in Fujita (1976), Masamune's taxon is an early-blooming form of *H. montana* and is not related to *H. kikutii* other than serving as the basionym.

H. sieboldiana var. *yakusimensis* Masamune: *J. Society of Tropical Agriculture*, 4:301 1932 (basionym); and *Florist. Geobotanical Studies of Yakushima*, p. 553 1934;

H. yakusimensis Maekawa: *Encyclopedia of Horticulture*, 2:633 1950 (p.p. basionym tant.; excl. Masamune's described early blooming populations of *H. montana* from Kosugidani (小杉谷), Yakushima (屋久島), Kagoshima-ken (鹿児島県).

H. caput-avis Ohwi: *The Flora of Japan*, 11:291 1965; p.p. (as *H. polyneuron*)

H. kikutii var. *caput-avis* Fujita: *Acta Phytotax. et Geobot.*, Vol. 27, 3/4:78 1976; (sensu lato; excl. the p. p. placement of this taxon with *H. sieboldiana*/*H. montana*).

Japanese Synonyms:

ヒメヒョウガギボウシ = 姫日向擬宝珠 = Hime Hyūga Gibōshi (≈ small Hyūga Hosta)

Horticultural Names and Synonyms:

H. kikutii var. *yakusimensis* 'Gosan'; a collected clone of the varietas from Hosta Hill R.G. HH10808607 1986.

H. kikutii var. *yakusimensis* 'Kosugidani' (see pages 6 and 7).

***H. kikutii* var. *yakusimensis* in Cultivation:** Different clones collected from wild populations represent *H. kikutii* var. *yakusimensis* in cultivation. One of the earliest examples dating from 1967 Summers No. 59 (from Hirao in Summers 1972) was subsequently thought to be a *H. 'Lancifolia'* hybrid, but that identification was never confirmed. Several accessions originated with W.G. Schmid, and other academic sources. As with other *H. kikutii* varieties and forms, the polymorphic nature of this variant is reflected in cultivated specimens. Although uniform in its



H. kikutii* var. *yakusimensis
 Elongating scapes with buds
 Hosta Hill R.G. © W.G. Schmid
 HH10498308 1983; Loc. cit.: Yakushima
 (屋久島 大隅諸島)



H. kikutii* var. *yakusimensis
 Emerging shoots
 Hosta Hill R.G. HH10498308 1983
 ©W.G. Schmid: 1987.04.11
 Ex: Ōsumi shotō
 鹿児島県 大隅諸島 産

flower morphology, this taxon shows considerable variation in the leaf sizes and shapes. The specimens respond to good cultivation practice and well prepared soil. Given copious moisture, cultivated specimens will grow plentifully and larger than in the wild. Most offered in the trade (as 'Gosan' form) are Hosta Hill R.G. types from Kagoshima-ken (鹿児島県).

Horticultural Progeny and Sports:

A limited number of clones were brought into the U.S. and those available have similar morphology and because of this the wide differences seen in other *H. kikutii* varieties cultivated in gardens is not as apparent (but does exist in wild populations!). This taxon has seen very little use in hybridizing and, considering its merits, it has seen no recorded use as a pod parent. The AHS *Hosta* Registrar's Web Site (HostaRegistrar.org) shows only one registered cultivar involved in a cross with *H. kikutii* var. *yakusimensis* (in this case as a pollen parent ♂), namely

H. 'Bojangles' = ♀ *H.* 'Swoosh' × ♂ (*H. kikutii* var. *yakusimensis*) by D. Dean 1999.

Sports and plastogenic mutations are unknown, but may exist in private hands in Japan and the West. One of the named Japanese clones is *H.* 'Kosugidani' listed by

the Gotemba Nursery. Its Japanese name is ヒメヒョウガギボウシ ‘小杉谷’ (*H. kikutii* var. *yakusimensis* ‘Kosugidani’.) The name is that of a former settlement which was home to more than 500 loggers and their families in the 1920s on Yakushima Island (屋久島). This named cultivar looks much like the species.



▲ *H. kikutii* var. *yakusimensis* ►
Hosta Hill R.G. © W.G. Schmid HH10498308 1983
Mid to late August; l.c.:Yakushima, Ōsumi shotō
(屋久島 大隅諸島)



▲ Early anthesis ▲
and
◀ Opening bud stage ▶



H. kikutii var. *yakusimensis* ►
Hosta Library
© Bob Axmear
Note the leaf size as compared to that of companion hostas on top of picture.



H. kikutii var. *yakusimensis*
Hosta Hill R.G. © W.G. Schmid 1984.07.29
HH10498308 1983 Mid to late August; l.c.:Yakushima, Ōsumi shotō
(屋久島 大隅諸島)

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