

IDENTIFICATION OF THE HOSTAS ("FUNKIAS") INTRODUCED AND CULTIVATED BY VON SIEBOLD

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CONTENTS

Introduction	2
The Hostas introduced before von Siebold	2
The names of the Hostas introduced by von Siebold	2
Identification of the Hostas mentioned in the catalogues of von Siebold's: methods and difficulties	4
Identification of von Siebold's Hostas: results	7
Tables 1-2	6-7
<i>Funkia aokii</i>	8
- <i>aurea</i>	8
- - <i>maculata</i>	8
- <i>cucullata</i> Sieb. and <i>F. sieboldiana</i> Lodd.	8
- <i>fortunei</i>	10
- - <i>variegata</i>	10
- <i>glauca</i> Sieb.	11
- - <i>variegata</i> Sieb.	11
- <i>glaucescens</i>	11
- <i>japonica</i> hort. <i>flore albo</i>	11
- <i>liliflora</i>	11
- <i>maculata</i> Sieb.	11
- <i>marginata</i> var. <i>lutescens</i>	12
- <i>ovata</i> Spreng. <i>aureomaculata</i>	12
- <i>sinensis</i> Sieb. and <i>F. sinensis</i> Sieb. var. <i>marmorata</i>	12
- <i>spatulata</i> Sieb.	13
- - - <i>albomarginata</i>	15
- - <i>albomarginata</i> var. <i>lutescens</i>	15
- <i>undulata</i> Sieb. <i>argenteo-vittata</i> Sieb.	15
- - - <i>medio-variegata</i>	16
- <i>viridi-marginata</i> hort.	16
Synonymy of some Hostas	16
Summary	19
Samenvatting	19
Acknowledgements	20
Literature	20
Plates 1-12	
<i>Meded. Landbouwhogeschool, Wageningen</i> 63 (6), 1-22 (1963)	1

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INTRODUCTION

The results of an elaborate study on the genus *Hosta* in Swedish gardens by N. HYLANDER were published in 1954. Many taxonomical, nomenclatural and historical problems were solved by this publication, but some have been left unsolved. The identification of many *Hostas* introduced and cultivated by von Siebold is one of these problems. The names of von Siebold's *Hosta* ("*Funkia*") introductions are known from his catalogues, but von Siebold never published any description of these *Hostas*. Consequently, it is not an easy task to identify them. Having been distributed over Europe from Leiden and Ghent, these *Hostas* may be studied best in the Netherlands. The *Hostas* cultivated in this country now have been studied by the present author, see HENSEN (1959a, 1959b, manuscripts). It appears from this study that some *Hosta* cultivars not known to Hylander from Swedish gardens, are grown in the Netherlands. The examination of these varieties could be expected to throw some light on the *Funkia* names mentioned in von Siebold's catalogues. In addition to this study on living plants the *Hosta* material preserved in the Rijksherbarium at Leiden and in the Botanical Museum at Utrecht was examined. The results of the investigations as regards the identification of the *Hostas* introduced or cultivated by von Siebold's are published in this article.

THE HOSTAS INTRODUCED BEFORE VON SIEBOLD

Only two Chinese *Hosta* species were grown in Europe before von Siebold started introducing plants from Japan, see BRETSCHNEIDER (1898).

Hosta plantaginea (Lam.) Asch. was the first to arrive. Seeds of this species were sent to the "Jardin des Plantes" at Paris between 1784 and 1789 by Ch. de Guignes, French consul at Macao. It was described as *Hemerocallis plantaginea* by LAMARCK (1789).

Hosta ventricosa Stearn was introduced into the botanical garden of George Hibbert at Clapham in 1790. It was first described as *Hemerocallis coerulea* by Andrews in 1797.

THE NAMES OF THE HOSTAS INTRODUCED BY VON SIEBOLD

These two Chinese species remained the only *Hostas* in Europe until 1829. In that year von Siebold, having lived in the Dutch factory at Nagasaki since 1823, sent a number of plants, including some *Hostas*, to the botanic garden at Leiden. Von Siebold returned to Europe in the next year, taking a number of Japanese plants with him. Among these plants were again some *Hostas*. After having returned to Antwerpen von Siebold brought these plants to the botanical garden at Ghent to remain there for a short time. However, the war between Belgium and the Netherlands breaking out shortly after von Siebold's return, von Siebold started for Leiden, leaving his Japanese plants at Ghent. Not until 1841 when peace had again been made, von Siebold got back a part of these plants. Consequently, the *Hostas* introduced in 1829 were distributed over Europe from the Netherlands, the plants imported in 1830 on the other hand being distributed from Belgium.

According to a communication by VON SIEBOLD himself (1844) he had introduced the following *Hostas* in 1829 and 1830: *Funkia cucullata* Sieb., *F. lanceolata* Sieb., *F. lancifolia* Spreng., *F. maculata* Sieb., *F. marginata* Sieb., *F. spatula-*

ta Sieb. *fol. albomarginatis*, and *F. undulata* Sieb. *fol. variegatis*. *Funkia cucullata*, *F. lanceolata* and *F. marginata* were sent to Leiden in 1829, *F. maculata* and *F. spatulata fol. albomarginatis* being introduced into Ghent in 1830. *F. undulata fol. variegatis* should have been introduced into Ghent in 1829, but nothing is known about von Siebold sending plants to Ghent in this year. As *F. undulata* was sent to Berlin from the botanic garden at Leiden before 1833 (OTTO & DIE-TRICH, 1833), "Ghent" may be a typographical error for "Leiden".

The next *Funkia* to arrive in Europe was *F. grandiflora*. In 1841 J. Pierot, a member of the staff of the Rijksherbarium at Leiden after having started for Japan was staying for some time in Indonesia. From there he sent some tropical plants and Japanese ones cultivated at Buitenzorg to von Siebold, *Funkia grandiflora* Sieb. being one of them.

Von Siebold having bought the estate Nippon near Leiden, the Japanese plants were cultivated in the "Acclimatization Garden" on his estate from ± 1845.

The *Funkias* introduced by von Siebold after 1844 can be known from the catalogues published by the Establishment of von Siebold & Coy.¹⁾ A rich collection of these catalogues is in the Library of the Agricultural University at Wageningen (see KOOIMAN & VENEMA, 1938, 1942).

In the catalogue for 1856 (VON SIEBOLD, 1856) *Funkia sinensis*, newly introduced then, was offered for the first time.

From 1859 to 1861 von Siebold was travelling over Japan again. The following *Hostas* were introduced in these years: *Funkia glauca variegata* Sieb., *F. striata* Sieb., and *F. undulata* Sieb. *angustifolia* (see VON SIEBOLD, 1861). *Funkia argenteo-striata* Sieb. and *F. glauca* Sieb. are said to be imported in the next year (VON SIEBOLD, 1862).

Von Siebold having died in 1866, J. Mater, gardener-in-chief of von Siebold's nursery, continued the establishment for account of von Siebold's widow. The first catalogue appearing after von Siebold's death (VON SIEBOLD, 1867) had been composed by Heinrich Witte, who was curator of the Botanic Garden at Leiden from 1855 till 1898. The author of the next catalogues is not indicated; H. Witte may have composed them too.

Two more *Hostas* are mentioned as newly introduced from Japan in the catalogues appearing after von Siebold's death: *Funkia sinensis* Sieb. var. *marmorata* (VON SIEBOLD, 1872) and *Funkia aokii* (VON SIEBOLD, 1879).

In addition to the *Hostas* mentioned up to now, the following ones, mostly varieties, were offered in the catalogues of von Siebold's, these *Hostas* not being mentioned until the year indicated after their names.

- Funkia ovata fol. aureo-maculatis* hort. 1856
- *sieboldiana* Lodd. 1856
- *spatulata* Sieb. 1860
- *undulata* Sieb. *argenteo-vittata* Sieb. 1863
- *univittata* v. Houtte, 1863
- *viridi-marginata* hort. 1863
- *coerulea* hort. *variegata*, 1867
- *japonica* hort. 1867

¹⁾ Von Siebold is cited as the author of each catalogue in this article, though it is evident he cannot have composed many of them himself.

- *viridis* hort. 1867
- *japonica* hort. *flore albo* 1868/69
- *fortunei*, 1870/71
- *variegata*, 1870/71
- *aurea*, 1874
- *maculata*, 1874
- *liliiflora*, 1875
- (*albo*-)*marginata* var. *lutescens*, 1876
- *spathulata albomarginata* var. *lutescens*, 1876
- *glaucescens*, 1877
- *japonica gigantea*, 1879.

Nothing is said about the origin of these *Funkias* in the catalogues of von Siebold's. However, von Siebold did not cite his own name after the names of these *Funkias* (*F. spatulata* and *F. undulata argenteo-vittata* excepted), as he used to do after the names of the plants introduced by himself. Sometimes "hort." is found after the names listed above, suggesting a garden origin. The majority of these varieties not being described in the revision of the genus *Hosta* by MAEKAWA (1940), they are likely to have arisen in European gardens. However, some are described by Maekawa as *Funkia viridis* ("*Hosta undulata* var. *erronema*") and *F. fortunei variegata* ("*Hosta tokudama* f. *aureo-nebulosa*"). These may have been introduced from Japan by others than von Siebold.

Funkia fortunei is known to have been introduced into England by Robert Fortune, who visited Japan in 1860/61.

The data given in this chapter are summarized in table 1.

IDENTIFICATION OF THE HOSTAS ("FUNKIAS") MENTIONED IN THE CATALOGUES OF VON SIEBOLD'S: METHODS AND DIFFICULTIES

Von Siebold never published any descriptions or illustrations of the *Hostas* he had introduced. Being more interested in the geography, the natural history, the horticulture, and the medicine of Japan than in taxonomy, he looked out for a plant taxonomist who was willing to study his collections from Japan. The Munich plant taxonomist J. G. Zuccarini became his collaborator. Parts of a "Flora japonica" were published by von Siebold and Zuccarini from 1835 to 1844. They were followed by "Florae japonicae familiae naturales" in 1845/46. Zuccarini died in 1848, leaving both works unfinished: neither of these works contained any description of a *Funkia* at that time. The study of von Siebold's herbarium from Japan was not restarted before 1862 when F. A. W. Miquel, being professor in botany at Utrecht, also became director of the Leiden Herbarium. In 1867, one year after von Siebold's death, Miquel published a preliminary revision of the genus *Funkia*, based on von Siebold's herbarium material (MIQUEL, 1867). Having published this short revision, Miquel studied the living *Hosta* plants grown in von Siebold's nursery and in the Utrecht botanic garden. He published the results two years later (MIQUEL, 1869).

Thus, the first complete revision of the *Hostas* introduced and grown by von Siebold did not appear until forty years after he had started introducing plants from Japan. During these forty years some species had been described or pictured by others.

Funkia cucullata had been represented by LODDIGES (1832) as *Hemerocallis*

sieboldiana, but this name had been published without any description, therefore being a nomen nudum. After Loddiges this species had been twice described and pictured: by HOOKER (1838b) as *Funckia sieboldiana* and by LINDLEY (1839) as *Funkia sieboldii*.

Descriptions and illustrations of *Funkia spatulata fol. albomarginatis* had been published by PAXTON (1838) who called it *Hemerocallis sieboldii* and by HOOKER (1838a) under the name *Funckia albomarginata*.

OTTO & DIETRICH (1833) had published a description of von Siebold's *Funkia undulata fol. variegatis* under the name *F. undulata*.

Funkia grandiflora had been described and pictured by LEMAIRE (1846) and *F. glauca* by WITTE (1868).

Funkia lancifolia having been described by Thunberg in the genus *Hemerocallis* as early as 1794, SPRENGEL (1825) had transferred it to the genus *Funkia*.

The other *Hostas* were yet without description when MIQUEL's publications (1867, 1869) appeared. Many years having passed between the introduction and the first description of many *Hostas*, this must have been one of the principal causes of the confusion in the nomenclature of this genus, which is still going on in horticulture in spite of the critical revisions by BAILEY (1930, 1932), STEARN (1931), MAEKAWA (1940), and HYLANDER (1954).

MIQUEL (1869) reduced the number of *Funkia* species accepted in von Siebold's catalogues from about eighteen to five, grouping the remaining thirteen as varieties or *lusus* under these five species. Miquel's revision, however, scarcely influenced the names of the *Hostas* used in horticulture afterwards. In 1891 nearly every *Funkia* cultivated in the Netherlands then was still bearing the same name as in the catalogues of von Siebold's. This is tested by an enumeration of *Funkias* published in the Dutch horticultural periodical *Sempervirens* (ANONYMUS, 1891b).

The names of the *Hostas* cultivated in Great Britain were strongly influenced by a short review of the genus *Funkia* published by BAKER (1870). This review became the base of a more detailed survey of the genus published by REGEL (1876). Regel's publication had great influence on *Hosta* nomenclature in Germany, as is tested by the third edition of Vilmorin's *Blumengärtnererei* by VOSS & SIEBERT (1896).

The great confusion in the nomenclature of the cultivated *Hostas* interferes with the identification of the *Funkias* listed in the catalogues of von Siebold's. For this purpose I have made use of the revisions and descriptions mentioned above and of some Dutch horticultural publications, viz. WITTE (1868, 1873, 1877, 1892), ANONYMUS (1891a, 1891b), and DE NOTER (1905). Being the author of one, perhaps of more of the catalogues distributed by von Siebold's, Witte was well acquainted with the collections at "Nippon".

The study of the herbarium material collected in Japan by von Siebold, Buerger, Textor, and others, being preserved in the Rijksherbarium at Leiden was also of special interest. Many sheets bear labels written by von Siebold or by one of his assistants, other labels bearing names hand-written by Miquel. The latter correspond with the names in the first revision of this author (MIQUEL, 1867). Miquel's second revision (MIQUEL, 1869) being based upon the plants grown in the Botanic Garden of the Utrecht University, the *Hosta* material preserved in the Botanical Museum at Utrecht was also studied. Specimens of a part of von Siebold's assortment turned out to be present in this material. Labels written by Miquel himself are wanting on nearly every sheet, but many labels

TABLE 1. Hostas ("Funkias") inserted in the catalogues of von Siebold's.¹⁾

Name in the catalogues	Year when first mentioned	Introduced by	Introduced in
<i>Funkia aokii</i>	1879	v. Siebold & Coy.	± 1879
- <i>argenteo-striata</i> Sieb.	1862 (1861?)	von Siebold	1862 (1859/61?)
- <i>aurea</i>	1874		
- <i>maculata</i>	1874		
- <i>coerulea</i> hort. <i>variegata</i>	1867		
- <i>cucullata</i> Sieb.	1844	von Siebold	1829
- <i>fortunei</i>	1870/71	Fortune	1861/62
- <i>variegata</i>	1870/71		
- <i>glauca</i> Sieb.	1862	von Siebold	1862
- <i>variegata</i> Sieb.	1861	von Siebold	1859/61
- <i>glaucescens</i>	1877		
- <i>japonica</i> hort.	1867		
- <i>flor. albo</i>	1868/69		
- <i>gigantea</i>	1879		
- <i>lanceolata</i> Sieb.	1844	von Siebold	1829
- <i>lanceifolia</i> Spreng.	1844	von Siebold	1829
- <i>liliflora</i>	1875		
- <i>maculata</i> Sieb.	1844	von Siebold	1830
- <i>marginata</i> Sieb.	1844	von Siebold	1829
- <i>var. lutescens</i>	1876		
- <i>medio-variegata</i> hort.	1863		
- <i>ovata</i> Spreng.	1844	Hibbert	1790
- <i>aureomaculata</i>	1856		
- <i>sieboldiana</i> Lodd.	1856	von Siebold	1829/30
- <i>sinensis</i> Sieb.	1856	von Siebold	± 1856
- <i>var. marmorata</i>	1872	v. Siebold & Coy.	± 1872
- <i>spat(h)ulata</i> Sieb.	1860		
- <i>albomarginata</i>	1844	von Siebold	1830
- <i>albomarginata var. lutescens</i>	1876		
- <i>striata</i> Sieb.	1861	von Siebold	1859/61
- <i>subcordata</i> Spreng.	1844	de Guignes	1784/89
- <i>grandiflora</i>	1856 (1844)	von Siebold	1841
- <i>undulata</i> Sieb.	1848 (1844)	von Siebold	1829
- <i>angustifolia</i>	1861	von Siebold	1859/61
- <i>argenteo-vittata</i> Sieb.	1863 (1862?, 1861?)	von Siebold	1859/62
- <i>univittata</i> v. Houtte	1863		
- <i>viridi-marginata</i> hort.	1863		
- <i>viridis</i> hort.	1867		

¹⁾ After the first date in the second and the last columns an earlier is sometimes mentioned in brackets, indicating the species or the variety in question to have been offered by von Siebold's from the earlier date but at first under another name.

written by others turned out to reflect Miquel's views, being likely to date from Miquel's time or from the first years after his death in 1871.

HYLANDER (1954) has pointed out some species described before Miquel's publications to have been erroneously interpreted by MIQUEL (1869). However, it appears from a comparison between the Leiden and the Utrecht material that Miquel's interpretations of *Funkia ovata* Spreng. and *F. sieboldiana* Hook. were yet right, when he had revised von Siebold's herbarium and was writing the first review (MIQUEL, 1867). Miquel consequently did not alter these correct views until he was studying von Siebold's living Funkias. Did some Funkias in von Siebold's garden bear erroneous names, Miquel being dissuaded from his

TABLE 2. Identification of the Hostas ("Funkias") grown by von Siebold's.¹⁾

Name in the catalogues	Identification
<i>Funkia aokii</i>	<i>Hosta aokii</i> hort. ex Bail.?
- <i>argenteo-striata</i> Sieb.	- <i>undulata</i> (Otto & Dietr.) Bail. 'Argenteo-vittata'?
- <i>aurea</i>	- <i>fortunei</i> (Bak.) Bail. 'Aurea'?
- - <i>maculata</i>	- - - - 'Aureomaculata'?
- <i>coerulea</i> hort. <i>variegata</i>	?
- <i>cucullata</i> Sieb.	- <i>sieboldiana</i> (Hook.) Engl. 'Cucullata'
- <i>fortunei</i>	- <i>tokudama</i> Maekawa f. <i>tokudama</i>
- - <i>variegata</i>	- - - 'Variegata'
- <i>glauca</i> Sieb.	- <i>sieboldiana</i> (Hook.) Engl. var. <i>hypophylla</i> Maekawa?
- - <i>variegata</i> Sieb.	?
- <i>glaucescens</i>	- <i>sieboldiana</i> (Hook.) Engl. cv.
- <i>japonica</i> hort.	- <i>albomarginata</i> (Hook.) Ohwi f. <i>spathulata</i> (Miq.)
- - - <i>flore albo</i>	- - - - 'Alba' [comb. nov.?
- - <i>gigantea</i>	?
- <i>lanceolata</i> Sieb.	- <i>longissima</i> Honda ex Maekawa
- <i>lancifolia</i> Spreng.	- <i>lancifolia</i> Engl.
- <i>liliiflora</i>	?
- <i>maculata</i> Sieb.	?
- <i>marginata</i> Sieb.	- <i>crispula</i> Maekawa
- - var. <i>lutescens</i>	- - - 'Lutescens'
- <i>medio-variegata</i> hort.	?
- <i>ovata</i> Spreng.	- <i>ventricosa</i> Stearn f. <i>ventricosa</i>
- - - <i>aureomaculata</i>	- - - 'Aureomaculata'
- <i>sieboldiana</i> Lodd.	- <i>sieboldiana</i> (Hook.) Engl. var. <i>sieboldiana</i>
- <i>sinensis</i> Sieb.	- <i>elata</i> Hyl.? <i>H. fortunei</i> (Bak.) Bail.?
- - - var. <i>marmorata</i>	(A variegated variety of the former)
- <i>spat(h)ulata</i> Sieb.	- <i>albomarginata</i> (Hook.) Ohwi f. <i>spathulata</i> (Miq.)
- - - <i>albomarginata</i>	- - - - 'Albomarginata' [comb. nov.
- <i>albomarginata</i> var. <i>lutescens</i>	- - - - 'Lutescens'
- <i>striata</i> Sieb.	- <i>undulata</i> (Otto & Dietr.) Bail. 'Argenteo-vittata'?
- <i>subcordata</i> Spreng.	- <i>plantaginea</i> (Lam.) Asch. var. <i>plantaginea</i>
- - - <i>grandiflora</i>	- - - - 'Grandiflora'
- <i>undulata</i> Sieb.	- <i>undulata</i> (Otto & Dietr.) Bail. 'Undulata'
- - - <i>angustifolia</i>	?
- - - <i>argenteo-vittata</i> Sieb.	- - - - - 'Argenteo-vittata'
- <i>univittata</i> v. Houtte	- - - - - 'Univittata'
- <i>viridi-marginata</i> hort.	- <i>fortunei</i> (Bak.) Bail. cv. ? <i>H. undulata</i> cv.?
- <i>viridis</i> hort.	- <i>undulata</i> (Otto & Dietr.) Bail. 'Erromena'

¹⁾ The names occurring in these catalogues are listed in the first column. Some were altered during the time when the catalogues appeared, viz.: *Funkia marginata* was named *F. albomarginata* from 1882, *F. sinensis* was spelt *F. chinensis* from 1876, *F. subcordata grandiflora* was listed as *F. grandiflora* before 1856, and *F. undulata* was listed as *F. undulata fol. variegatis* in 1844 and as *F. undulata medio-variegata* from 1867. These Funkias have been listed only once.

correct interpretations by this? However this may be, MIQUEL (1869), when publishing the second revision, certainly interpreted *F. ovata* and *F. sieboldiana* in an erroneous way, as Hylander has pointed out.

IDENTIFICATION OF VON SIEBOLD'S HOSTAS: RESULTS

The conclusions to which I have arrived with regard to the identity of the Funkias inserted in the catalogues of von Siebold's are given in table 2.

Several identifications given in this table agreeing with Hylander's, comment is superfluous. However, the remaining identifications are argued below.

Funkia aokii

A *Hosta aokii* grown in the U.S.A. was introduced there from Europe, as BAILEY (1927) states. It may be identical with the *Funkia aokii* introduced from Japan by von Siebold's and described shortly in a catalogue (VON SIEBOLD, 1879) as a plant having elliptic leaves and very light blue flowers, tinted with pink. The Botanical Gardens at Wageningen have recently received plants named *Hosta aoki* from Mr. H. A. Zager, Des Moines, Iowa, U.S.A., but they could not be studied yet.

Funkia aurea

This variety has been shortly described by ANONYMUS (1891b). Its leaves were variegated with yellow in spring and in early summer, becoming almost quite green afterwards. Judging from the plants grown as *Hosta aurea* in the Netherlands now (= *H. fortunei* Bail. 'Aurea'), *Funkia aurea* hort. Sieb. may have been the same variety as *Hosta lancifolia* var. *aurea* WEHRHAHN (1934), the latter being the basionym of *H. fortunei* 'Aurea'. However, the leaves of this variety are nearly yellow in spring, the green veinlets being very inconspicuous, whereas the leaves of *Funkia aurea* hort. Sieb. are described as variegated with yellow in spring.

Funkia aurea maculata

Funkia aurea maculata was mentioned by ANONYMUS (1891b), but the short description does not include any distinction between this variety and *F. aurea*. Being very near that *Funkia* consequently, *F. aurea maculata* might be identical with *Hosta lancifolia* var. *aureo-maculata* WEHRHAHN (1934), the latter being the basionym of *H. fortunei* 'Aureomaculata'. This variety is described by Wehrhahn as only differing from *H. lancifolia* var. *aurea* by the pure green margin of the leaves in spring.

Adopting the name *Funkia ovata* var. *albopicta* MIQUEL (1869), HYLANDER (1954) used the name *Hosta fortunei* var. *albopicta* (Miq.) Hyl. for the variety called *H. fortunei* 'Aureomaculata' in this article. However, Miquel's description reads as follows: "foliis elliptico-oblongis firmulis inter venas transversas albido-chloroticis pallidove-iridulis". Nothing being said by Miquel about a green margin, the identification of this variety with *Hosta fortunei* 'Aurea' should be more likely than Hylander's, were it not that Miquel has made mention of a synonym *Funkia viridi-marginata* Sieb., rather suggesting *Hosta fortunei* 'Aureomaculata' to have been meant. The identity of *Funkia ovata* var. *albopicta* therefore remaining doubtful, I have preferred to drop Miquel's name, using Wehrhahn's epithet "*aureo-maculata*", the identity of which is beyond all doubts.

Funkia cucullata Sieb. and *F. sieboldiana* Lodd.

Funkia cucullata Sieb. does certainly belong to *Hosta sieboldiana* (Hook.) Engl. sensu lato, as appears from herbarium specimens collected in Japan, labelled *Hemerocallis cucullata* by von Siebold, Buerger or Pierot, and identified as *Funkia sieboldiana* Hook. by Miquel (Cf. MIQUEL, 1867). VON SIEBOLD (1844) was of the same opinion, giving "*Funkia sieboldiana* Dens." as a synonym of *F. cucullata* Sieb. I do not know why von Siebold mentioned J. Denson in stead of Loddiges or Hooker after *F. sieboldiana*. Did he mean that a plant received from

Denson under this name was identical with *F. cucullata* Sieb.? As a matter of fact many author's names in von Siebold's catalogues are rather introducer's names or winner's than author's names in the current sense. Both names, *F. cucullata* Sieb. as well as *F. sieboldiana* Lodd., were listed in VON SIEBOLD's catalogues from 1856. Does this mean von Siebold being of the opinion then that *F. cucullata* and *F. sieboldiana* were two different species or varieties? WITTE (1868), who knew these Funkias as grown in von Siebold's garden, considered them as two varieties of the same species. He declared *F. cucullata* to be very near *F. sieboldiana*, the former differing from the latter by a glaucous bloom on either side of the leaves and by bracts slightly larger. MIQUEL (1869) gave more differences, but his interpretation of *F. sieboldiana* Hook. had altered since 1867, Miquel identifying it with *F. viridis* Sieb. (= *Hosta undulata* Bail. 'Erromena') now, Cf. STEARN (1931) and HYLANDER (1954). The true *F. sieboldiana* Hook. was called *F. cucullata* by Miquel now, as is tested by exsiccata preserved in the Utrecht Botanical Museum, bearing two labels: the earlier reading *F. sieboldiana* and the later reading *F. cucullata*. In Miquel's publication this name has been changed into *F. glauca* var. *cucullata*.

WITTE (1868) may have been right in considering *F. cucullata* and *F. sieboldiana* as two varieties of the same species only. *Hosta sieboldiana* is indeed a very variable species. This appears from Maekawa's description (MAEKAWA, 1940) reading among other things: "planta glaucina vel viridis". Von Siebold is likely to have introduced several plants of this species and they may have belonged to different clones. This is apparent from the following facts.

A plant introduced into the Botanic Garden at Leiden in 1829 was sent to England as early as 1830 where it was represented by C. LODDIGES (1832) as *Hemerocallis sieboldiana* (see Pl. 1). Six years later HOOKER (1838b) again described a plant which was said to belong to the same species, naming it *Funkia sieboldiana*. This plant had reached Hooker, who was professor in botany at Glasgow then, from Belgium. It had been sent to Glasgow by one "Mr. M'Coy", as Hooker states. This Mr. M'Coy must have been L. J. Makoy who had a nursery at Liège in that time, Cf. MORREN & DE VOS, 1887. As HOOKER (1838b) and MORREN & DE VOS (1887) state, *Funkia sieboldiana* had been introduced into Belgium by von Siebold. This is likely to mean *F. sieboldiana* being introduced into Belgium directly from Japan in 1830. If this is true, Hooker's *F. sieboldiana* would have come from another sending (to Ghent, 1830) as Loddiges's *Hemerocallis sieboldiana* which must have been *Funkia cucullata*, sent to Leiden in 1829. Consequently, the two may have belonged to different clones. As a matter of fact Loddiges's illustration shows a plant differing from Hooker's in some characteristics, among other things by its bluish green leaves. This corresponds with Witte's information (WITTE, 1868) and ANONYMUS's (1891b) on *F. cucullata*. Hooker's plant, on the other hand, had green leaves, as is shown by the illustration and by the description, nothing being said about the colour of the leaves there. If they had been glaucous or bluish green, Hooker would not have failed to make mention of it. It is true, Hooker's plant had been grown under glass which may have caused some aberrant characteristics shown by the illustration, as WITTE (1868) and HYLANDER (1954) supposed. This may be so, but the leaves of *F. sieboldii* as described and illustrated by LINDLEY (1839) were pale green on the upper side, suggesting a thin bloom half faded away, and distinctly glaucous only on the under side. Yet Lindley's illustration was apparently made after a

plant grown outdoors. As Lindley's illustration (see PL. 2) has been declared by WITTE (1868) to be a better one than Hooker's, *Funkia sieboldiana* as cultivated in von Siebold's garden may be concluded to have been a variety with leaves loosing their bloom entirely or for the greater part. This corresponds with plants still grown in Europe and named *Hosta sieboldiana* sensu stricto by HYLANDER (1954).

Funkia cucullata was yet grown in the Netherlands in 1891, as ANONYMUS (1891b) tested. It may still be grown anywhere in Europe under the names *Hosta sieboldiana* or *H. glauca*, Cf. PLS. 3, 6, 7.

Funkia fortunei

A *Funkia* introduced into England by Robert Fortune in 1861 or 1862 was shown on the Royal Horticultural Society's Summer Show by the firm of Standish, Bagshot, in 1863. ANONYMUS (1863) shortly described it as "a Japanese *Funkia* with glaucous leaves and French white flowers". This plant is likely to be identical with *F. sieboldiana* β *fortunei* (Syn.: *F. fortunei* hort.) as described and excellently illustrated by REGEL (1876), see PL. 4. The leaves of this plant are said to be thickly bluish pruinose, its flowers being white. WITTE (1877) declared this *Funkia* to have been grown in the Netherlands for some years. As a matter of fact von Siebold's had offered a *F. fortunei* since 1870/71. It is said to have been a slow grower (WITTE, 1892) with thick blue leaves (ANONYMUS, 1891b). *Funkia fortunei* hort. Sieb. may be concluded from this to have been *F. sieboldiana* β *fortunei* Reg. (= *Hosta tokudama* Maekawa).

The same may be said about the plant usually grown under the name *F. fortunei* for years afterwards, Cf. JÄGER (1873), WITTE (1877), S. J. (1888), ANONYMUS (1891b), WITTE (1892), ROBINSON (1893), VOSS & SIEBERT (1896), IRVING (1903), and SILVA TAROUCA (1910). *Hosta tokudama* is still grown in Germany and in the Netherlands under the name *Hosta fortunei*.

After the critical studies by BAILEY (1930), STEARN (1931), and HYLANDER (1954) it became evident that *Funkia fortunei* as described by BAKER (1876) was quite another plant (see PL. 8), differing in many characteristics from Regel's plant. Being aware Baker's name to have priority, MEAKAWA (1940) gave a new name to Regel's plant, viz. *Hosta tokudama*. However, *Hosta fortunei* has remained an ambiguous name in horticulture up to now, Baker's plant as well as Regel's being grown under this name in the Netherlands now.

Hosta tokudama being the correct name for Regel's plant if it is considered as a species, this name has been adopted in this article. However, if it should be considered as a variety of *Hosta sieboldiana*, its correct name would be *H. sieboldiana* var. *fortunei* (Reg.) Asch. & Graebn.

Funkia fortunei variegata

This variety was described by ANONYMUS (1891b) as differing from *F. fortunei* (= *Hosta tokudama* Maekawa, as stated above) by its yellow variegated leaves only. A *Hosta fortunei variegata* answering to this description is still grown in the Netherlands. I do not know anything about the origin of this variety. However, *Hosta tokudama* f. *aureo-nebulosa* MAEKAWA (1940) being most likely the same variety, *Funkia fortunei variegata* may have been introduced from Japan.

Funkia glauca Sieb.

Funkia glauca, introduced by von Siebold in 1862, was described by MIQUEL (1869). H. WITTE (1868), who named it *F. sieboldiana* var. *glauca*, published a coloured picture (see PL. 5). With the aid of both description and picture *F. glauca* can be identified with certainty as a variety of *Hosta sieboldiana*. It is likely to have been intermediate between *H. sieboldiana* var. *sieboldiana* and *H. sieboldiana* 'Elegans'. MAEKAWA (1940) may be right in identifying it with a variety of *Hosta sieboldiana* still cultivated in Japan, viz. *H. sieboldiana* var. *hypophylla* Maekawa. Maekawa's short description and picture, however, are not precise enough to allow a decision whether this *H. sieboldiana* var. *hypophylla* is identical with *Funkia glauca* or is not.

Some aberrant plants cultivated by a Dutch grower under the name *Hosta fortunei robusta*, a trade name of *H. sieboldiana* 'Elegans', (see PLS. 9, 10) agree rather well with both description and picture of *Funkia glauca*. Consequently, *F. glauca* or a similar variety (Cf. *F. glaucescens*) may still be in cultivation here and there in Europe.

Funkia glauca variegata Sieb.

This name is only mentioned in a provisional catalogue of plants introduced in 1859, 1860, and 1861 (VON SIEBOLD, 1861). Its identity is unknown, but it may not be the same variety as was offered under the name *F. fortunei variegata* from 1870/71.

Funkia glaucescens

Funkia glaucescens hort. Sieb. is likely to have been a variety of *Hosta sieboldiana*. It did not much differ from *F. glauca* as ANONYMUS (1891b) stated. BAILEY (1903) and SILVA TARUCA (1910) agree with Anonymus, listing *F. glaucescens* under the synonyms of *F. sieboldiana*.

Funkia japonica hort. flore albo

This variety has been described in MIQUEL's revision (1869) as *F. ovata* var. *spathulata* lusus β (Syn.: *F. japonica* flore albo Sieb.). It is likely to be identical with the taxon described by HYLANDER (1954) as *H. albomarginata* var. *alba* (Irv.) Hyl., as was argued by Hylander. It should be remarked here that IRVING (1903) was not the first to use the epitheton "alba" for this taxon: *Funkia lancifolia* var. *alba* ROBINSON (1893) must refer to the same variety.

Funkia liliiflora

The identity of *F. liliiflora* is uncertain. Probably the same variety was mentioned by ANONYMUS (1891b) under the name *F. liliiflora alba* and shortly described as a plant with numerous stems and white flowers. This suggests an identity with *Hosta albomarginata* var. *alba* (*Funkia japonica alba*), which name is not mentioned in Anonymus's survey. To be sure BAILEY (1903) listed *F. liliiflora* as a synonym of *F. subcordata* (= *Hosta plantaginea* Asch.), but this name may have been used in American gardens for another taxon as in Dutch ones.

Funkia maculata Sieb.

F. maculata Sieb. must have been a variety of one species or more with leaves

variegated with deep and light green, as MIQUEL (1869) informs us. Miquel listed this name as a synonym of *F. ovata* var. *maculata* as well as of *F. latifolia* lusus *maculata*. However, the identity of these two varieties is still uncertain, Cf. HYLANDER (1954).

Funkia marginata var. *lutescens*

This variety was offered as a novelty in a price-list for 1876 (VON SIEBOLD, 1876). Its leaves were described as margined with white and variegated with yellow. ANONYMUS (1891b) asserts it to be a variety of *Funkia albomarginata*, which was the name used in stead of *F. marginata* Sieb. in the later catalogues of von Siebold's as was stated above. Consequently *F. (albo-)marginata* var. *lutescens* was a variety of *Hosta crispula* Maekawa.

H. crispula 'Lutescens' is most likely to be identical with the yellow variegated variety of that species mentioned by HYLANDER (1954), p. 370, though Hylander's variety arose at Uppsala as a sport from a green leaved plant.

Funkia ovata Spreng. *aureomaculata*

ANONYMUS (1891b) stated *F. ovata* fol. *aureomaculatis* to be only a variety of *F. ovata* (= *Hosta ventricosa* Stearn) with yellow variegated leaves. A herbarium specimen collected in the Botanic Garden at Leiden between 1900 and 1910 and labelled "*Funkia ovata* Spreng. *aureomaculata*" (Herb. Leiden Nr. 947.325.353) does undoubtedly belong to *Hosta ventricosa*, but an eventual variegation cannot be established anymore. This variety is still grown in the Netherlands. *Funkia latifolia* (= *Hosta ventricosa*) lusus *aureo-maculata* MIQUEL (1869) is likely the same variety, as HYLANDER (1954) supposed.

Funkia sieboldiana Lodd.

See *F. cucullata* Sieb.

Funkia sinensis Sieb.

In spite of the name *F. sinensis* this *Funkia* was yet supposed by MIQUEL (1869) to have been introduced from Japan, not directly from China. *F. sinensis* being introduced by von Siebold, it will have come from Japan, I daresay.

Herbarium specimens or illustrations from von Siebold's time or from the years after being wanting, only descriptions are left to us. However, they are too short for identification. Three *Funkias* only slightly different from each other were known to WITTE (1868) as growing in von Siebold's garden: *F. sieboldiana*, *F. cucullata* and *F. glauca*. They are reckoned among the varieties of *Hosta sieboldiana* now, as stated above. A fourth, named *Funkia sinensis*, differed a little more from the former three, its leaves being lighter green and its flowers a little more intensely coloured. ANONYMUS (1891b) described the latter as a tall and robust plant with large, green leaves. Judging from the description of *F. sinensis* var. *marmorata* in a short paper issued by VON SIEBOLD'S (1872), *F. sinensis* must have had light bluish purple flowers. As to *F. sinensis* var. *marmorata*, this variety is known from ANONYMUS's publication (1891b) to differ from *F. sinensis* by its marbled leaves only.

According to these publications *F. sinensis* may have been a species narrowly related to *Hosta sieboldiana*. If it is still grown in Europe, it may be identical

with *Hosta elata* Hyl., a species belonging in Maekawa's classification to the same section of the genus as *H. sieboldiana*. To be sure MIQUEL (1869) ranged *Funkia sinensis* as a variety under *F. latifolia* Miq. (= *Hosta ventricosa* Stearn), but it seems unlikely that this variety has anything to do with *H. ventricosa*, Cf. HYLANDER (1954). Miquel's description of this variety runs as follows: "Foliis viridibus, racemis abbreviatis". The first part of this passage refers to the difference from the varieties ("lusus") of *F. latifolia* with variegated leaves; the second calls attention to a distinction between *F. sinensis* and *F. latifolia* (= *Hosta ventricosa*), the racemes of the latter being long and loose, but those of the former being shorter and more compact. This corresponds with the difference between *H. elata* and *H. ventricosa*, the former having denser and often shorter racemes than the latter.

The information on the horticultural history of *H. elata* is poor. This species could be ascertained, however, to have been introduced before 1866, when VILMORIN-ANDRIEUX (1866) published an illustration of a plant erroneously named *Hemerocallis lancifolia*, but in point of fact most likely being *Hosta elata* (see FIG. 1). This picture was reprinted many times; later reprints were enumerated by HYLANDER (1954) among the illustrations of *H. elata*. Being grown in France about 1866, *H. elata* was also cultivated in the Netherlands then. This is tested by a herbarium specimen in the Botanical Museum at Utrecht, Nr. 039020 (see PL. 11). It was labelled "An *cucullata*" in Miquel's time. Hylander identified it with *H. sieboldiana* s. str., but it belongs to *H. elata* in my opinion. Now, it is obvious that *H. elata*, if grown anywhere in the Netherlands, must have been grown in von Siebold's garden too. *H. elata* might consequently be identical with *Funkia sinensis* as we know it from the informations mentioned above.

WITTE (1868) was inclined only to consider *F. sinensis* as a variety of *F. sieboldiana* and so did several later authors, who often enumerated *F. sinensis* under the synonyms of *F. sieboldiana* (*F. sieboldii*), Cf. IRVING (1903), BAILEY (1903), NASH (1911), and BAILEY (1927). On the other hand *Hosta elata* is also sure to have been cultivated as *Funkia sieboldii*, as is demonstrated by an illustration by J. H. (1890) (see FIG. 2). *Hosta elata* was even grown as *H. sieboldii* and *H. sieboldiana*, when WEHRHAHN (1936) erroneously identified it with *Funkia latifolia* Miq. (Cf. HYLANDER, 1954). As Wehrhahn states, this "*Hosta latifolia*" (= *H. elata*) came to him not only under the names mentioned above, but also as *H. sinensis*!

So *Funkia sinensis* Sieb. may be identical with *Hosta elata*, but another possibility cannot be ruled out: *F. sinensis* Sieb. might have belonged to *Hosta fortunei* (Bak.) Bail. sensu lato. Thus a plant grown in the Experimental Garden at Auderghem as *H. chinensis* turned out to be *H. fortunei* 'Marginato-alba'. This is shown by a herbarium specimen collected by B. K. Boom in 1952 and preserved at Leiden (Nr. 952.287.626).

Funkia sinensis Sieb. var. *marmorata*

See *F. sinensis* Sieb.

Funkia spatulata Sieb.

The only difference between this plant and *F. spatulata albomarginata* (see below) consists in the white margin of the leaf blade lacking in the former, as



FIG. 1. *Hemerocallis lancifolia* Thunb. From VILMORIN-ANDRIEUX & CIE. Les fleurs de pleine terre. Atlas fig. 470 (1866).



FIG. 2. *Funkia Sieboldi* as pictured by J. H. in *The Garden* 38: 79 (1890).

ANONYMUS (1891b) states. It therefore is identical with the normal green leaved variety of *Hosta albomarginata* growing wild in Japan and described by MAEKAWA (1940) under the erroneous name *H. lancifolia* var. *thunbergiana*, as has been pointed out by HYLANDER (1954). Nothing is known about an introduction into Europe. It might have arisen in Europe as a sport or a seedling of *H. albomarginata* 'Albomarginata'. A short information by RODIGAS (1864) may refer to its origin. Rodigas had sown "*Funkia japonica foliis albomarginatis*" (= *Hosta albomarginata* 'Albomarginata') and had won a variety called "*F. japonica foliis viridimarginatis*", which was said to be well known in cultivation then.

On the other hand *F. spatulata* was first mentioned in the catalogi of VON SIEBOLD'S in 1860, only four years earlier than Rodigas's publication. Consequently, *F. spatulata* Sieb. might have been identical with Rodigas's "*F. japonica foliis viridimarginatis*".

Funkia spatulata Sieb. *albomarginata*

Funkia spatulata albomarginata was introduced from Japan into Belgium in 1830, as VON SIEBOLD (1844) tested. L. J. Makoy who was a plant grower at Liège about this time, sent it to the Glasgow Botanic Garden as "*Funkia* sp. *foliis marginatis*". Being professor at Glasgow then, HOOKER (1838a) published an illustrated description under the name *F. albomarginata*. This species was mentioned by MIQUEL (1867), who called it *F. ovata* var. *albomarginata* (Syn.: *F. albomarginata* Hook.). In MIQUEL'S second publication on *Funkia* (1869) this species is likely to occur under two names, viz. *F. ovata* var. *albomarginata* (Syn.: *F. albomarginata* Hook.) and *F. ovata* var. *spathulata* Miq. lusus α (Syn.: *F. spatulata albomarginata* Sieb.). What Miquel understood by the latter name is clear from Siebold's synonym cited by Miquel. However, the former also must stand for *Hosta albomarginata* (Hook.) Ohwi, as appears from specimens in the Utrecht Herbarium labelled *F. ovata* var. *albomarginata* in Miquel's time: see amongst other things Nr. 039016 (see PL. 12). It looks surprising that *Hosta albomarginata* should occur twice in Miquel's publication, but the two names may refer to two different clones. A clone slightly distinct from the original one may have arisen from seedlings. As a matter of fact *H. albomarginata* was sometimes sown, as was tested by PAXTON (1838) and RODIGAS (1864).

Funkia spatulata albomarginata var. *lutescens*

In a price-list of VON SIEBOLD'S (1877) *F. spatulata albomarginata* var. *lutescens* is said to differ from *F. spatulata albomarginata* (= *H. albomarginata* Ohwi) by the yellow variegation of the leaves only. It may have disappeared from cultivation in Europe afterwards.

Funkia undulata argenteo-vittata Sieb.

A picture of *F. undulata argenteo-vittata* was published in Sempervirens (ANONYMUS, 1891a), see FIG. 3. Its leaves differ markedly from those of the typical variety of *F. undulata* as described by OTTO & DIETRICH (1833), being wider and having wider green margins, but being especially distinct by the green streaks running from the margin parallel to the nerves into the white centre.

F. undulata argenteo-vittata was first listed in VON SIEBOLD'S catalogues in 1863. However, this variety is likely to have been mentioned under another name in an additional catalogue of plants introduced from Japan in 1862 (VON



FIG. 3. *Funkia undulata argenteo-vittata* as pictured in *Sempervirens* 20: 391 (1891).

SIEBOLD, 1862), the *Funkia argenteo-striata* listed there being probably the same variety. This may also be said of the *Funkia striata* only occurring in a still earlier catalogue (VON SIEBOLD, 1861).

Funkia undulata Sieb. *medio-variegata*

The name of *F. undulata medio-variegata* was listed in the catalogues of VON SIEBOLD'S since 1867, undoubtedly indicating *Hosta undulata* 'Undulata', which had been listed as *Funkia undulata fol. variegatis* or simply as *F. undulata* before. Did Witte alter the name of this variety in order to avoid mistaking this variety for *F. undulata argenteo-vittata*?

Plants belonging to *Hosta undulata* are still cultivated in the Netherlands under the names *H. undulata medio-variegata* and *H. argentea vittata*, but without distinguishing between cv. 'Undulata', 'Argenteo-vittata', and 'Univittata'.

Funkia viridi-marginata hort.

F. viridi-marginata Sieb. was cited as a synonym of *F. ovata* var. *albopicta* by MIQUEL (1869). Miquel presumably indicating *Hosta fortunei* 'Aurea' or 'Aureomaculata' by the latter name, von Siebold's *Funkia viridi-marginata* may have been *Hosta fortunei* 'Aureomaculata'. However, *Funkia viridi-marginata* hort. has also been cited by Miquel as a synonym of *F. ovata* var. *undulata* (= *Hosta undulata* Bail.), suggesting *Funkia viridi-marginata* to have been a variety of *Hosta undulata*.

SYNONYMY OF SOME HOSTAS

In connection with my studies in the taxonomy of the cultivated *Hostas* some of the names used by HYLANDER (1954) and a number of the synonymies inserted in that publication should be changed or completed as follows.

Hosta albomarginata (Hook.) Ohwi, Act. Phytotax. Geobot. **11**: 265. 1942.
Basionym: *Funkia albomarginata* Hook. in Curtis Bot. Mag. **65**: pl. 3657. 1838.
cv. 'Albomarginata'.

Syn.: *Funkia spatulata* Sieb. fol. *albomarg.* Sieb. Jaarb. Ned. Mij Aanmoed. Tuinb. **1844**: 29, nom. nud.; *F. ovata* var. *albomarginata* Miq. Ann. Mus. Bot. Lugd.-Bat. **3**: 153. 1867; *F. lancifolia* f. *albomarginata* Bak. Jour. Linn. Soc. [London], Bot. **11**: 368. 1870.

cv. 'Alba'. Basionym: *Funkia lancifolia* var. *alba* W. Robinson, Engl. Flow. Gard. ed. 3.423.1893.

Syn.: *F. japonica flore albo* Anonymus in Sieb. Cat. **1868/69**: 43, nom. nud. et Miq. Versl. Med. Akad. Wet. Amsterdam, Nat. Ser. 2. **3**: 300. 1869, pro syn.; *F. ovata* [var.] f. *spathulata* lusum β . Miq. loc. cit.

f. **spathulata** (Miq.) comb. nov. Basionym: *Funkia ovata* [var.] f. *spathulata* Miq. loc. cit.

Syn.: *F. spatulata* Sieb. Cat. **1860**: 4, nom. nud.; *Hosta lancifolia* var. *thunbergiana* Stearn sensu Maekawa, Jour. Fac. Sci. Univ. Tokyo, Bot. **5**(4): 399. 1940 (excl. syn.); *H. albomarginata* f. *viridis* hort. Uppsala.

H. crispula Maekawa, op. cit. 364 (excl. syn. Bailey).

cv. 'Crispula'.

Syn.: *Hemerocallis albomarginata* hort. ex Vilm.-Andr. Fleurs pl. terre **1**: 266. 1863 (excl. syn.); *Funkia albomarginata* Anonymus in Sieb. Prix-cour. **1882**: 25, nom. nud. et in *Sempervirens* **20**: 532. 1891, non Hook. 1838; *F. ovata* var. β . *intermedia* f. *marginata* Bak. Jour. Linn. Soc. [London], Bot. **11**: 368. 1870; *F. ovata marginata* Reg. Gartenfl. **30**: 23. 1881; ? *F. ovata* [f.] δ . *albo-marginata* Reg. Gartenfl. **25**: 162. 1876.

cv. 'Lutescens'. Basionym: *Funkia marginata* var. *lutescens* Anonymus in Sieb. Prix-cour. **1876**: 1.

Syn.: *F. albomarginata* var. *lutescens* Anonymus in *Sempervirens* **20**: 532. 1891; *Hosta crispula* fol. *maculatis* hort. Uppsala.

H. elata Hyl. Act. Hort. Berg. **16**(11): 394. 1954.

Syn.: ? *Funkia sinensis* Sieb. Cat. **1856**: 12, nom. nud. et H. Witte, Flora [Groningen] **223**. 1868; ? *F. latifolia* β . *sinensis* Miq. Versl. Med. Akad. Wet. Amsterdam, Nat. Ser. 2. **3**: 303. 1869; *Hosta sinensis* hort. pro parte; ? *Funkia ovata* [f.] β . *latifolia* Reg. Gartenfl. **25**: 162. 1876; ? *Hostia coerulea* f. *latifolia* Voss in Vilm. Blumeng. ed. 3. **1**: 1075. 1896; *Funkia* vel *Hosta sieboldiana* hort. pro parte; *Funkia* vel *Hosta sieboldii* hort. pro parte.

H. fortunei (Bak.) Bail. cv. 'Aurea'. Basionym: ? *Funkia aurea* Anonymus in Sieb. Pijlslijst **1874**: 8, nom. nud. et in *Sempervirens* **20**: 532. 1891; *Hosta lancifolia* var. *aurea* Wehrh. Gartenschönh. **15**: 204. 1934.

Syn.: ? *Funkia ovata* [var.] c. *albopicta* Miq. op. cit. 299, pro parte; *Hosta fortunei* var. *albopicta* f. *aurea* Hyl. Act. Hort. Berg. **16** (11): 391. 1954; *H. aurea* hort. neerl.; *H. coerulea aurea* hort. neerl.

cv. 'Aureomaculata'. Basionym: ? *Funkia aurea maculata* Anonymus in Sieb.

Prijslijst 1874: 8, nom. nud. et in *Sempervirens* 20: 532. 1891; *Hosta lancifolia* var. *aureo-maculata* Wehrh. Gartenschönh. 15: 204. 1934.

Syn.: ? *Funkia ovata* [var.] c. *albopicta* Miq. loc. cit., pro parte; *Hosta fortunei* var. *albopicta* Hyl. Act. Hort. Berg. 16 (11): 389. 1954; *H. coerulea aurea marginata* hort. neerl.

cv. 'Marginato-alba'. Basionym: *H. fortunei* var. *marginato-alba* Bail. Gent. Herb. 2 (3): 137. 1930.

Syn.: *H. crispula* Maekawa, pro parte (quoad syn. Bailey, non quoad plant. descr.); *H. ovata albomarginata* hort. neerl. pro parte.

cv. 'Viridis'. Basionym: *H. fortunei* var. *albopicta* f. *viridis* Hyl. op. cit. 391.

H. sieboldiana (Hook.) Engl. var. *sieboldiana*. Basionym: *Funkia sieboldiana* Hook. Curtis Bot. Mag. 65: pl. 3663. 1838.

Syn.: *Hosta sieboldiana* sens. strict. Hyl. op. cit. 385; *Funkia sieboldi* Lindl. Bot. Reg. 25: pl. 50. 1839; ? *Hemerocallis cucullata* Sieb. herb. pro parte.

cv. 'Cucullata'. Basionym: *Funkia cucullata* Sieb. Jaarb. Ned. Mij Aanmoed. Tuinb. 1844: 29, nom. nud. et H. Witte, Flora [Groningen] 223. 1868.

Syn.: *Hemerocallis cucullata* Sieb. herb. pro parte; *Funkia glauca* var. *cucullata* Miq. op. cit. 304; ? *Hemerocallis sieboldiana* Lodd. Bot. Cab. 19: pl. 1869. 1832, nom. nud.

cv. 'Elegans'. Basionym: *H. sieboldiana* var. *elegans* Hyl. op. cit. 386.

Syn.: ? *Funkia fortunei* var. *robusta* Arends ex Silv. – Tar. Freilandstaud. 103.1910, nom. subnud. et Laplace, Rev. Hort. 98: 148. 1926; *Hosta fortunei robusta* hort. neerl.; *H. glauca robusta* hort. neerl.

H. tokudama Maekawa, op. cit. 366.

f. *tokoduma*.

Syn.: *Funkia fortunei* Anonymus in Sieb. Cat. 1870/71: 43, nom. nud. et in *Sempervirens* 20: 532. 1891; ? *F. fortunei* Jäger, Schönst. Pfl. 379. 1873, non Bak. 1876; *Hosta fortunei* hort. neerl. pro parte; *Funkia sieboldiana* β. *fortunei* Reg. Gartenfl. 25: 162. 1876; *Hosta sieboldiana* f. *fortunei* Voss in Vilm. Blumeng. ed. 3. 1: 1075. 1896; *Hosta sieboldiana* var. *glauca* Makino, Bot. Mag. [Tokyo] 16: 173. 1902, non *Funkia sieboldiana* var. *glauca* Witte; *Hosta glauca* hort. neerl. pro parte.

cv. 'Variegata'. Basionym: *Funkia fortunei variegata* Anonymus in Sieb. Cat. 1870/71: 43, nom. nud. et in *Sempervirens* 20: 532. 1891.

Syn.: *Hosta fortunei variegata* hort. neerl.; *H. fortunei aurea* hort. neerl.; *H. tokudama* f. *aureo-nebulosa* Maekawa, op. cit. 368.

H. undulata (Otto & Dietr.) Bail. cv. 'Albomarginata'. Basionym: *H. undulata* var. *albomarginata* Maekawa, Jour. Jap. Bot. 12: 506. 1936.

Syn.: *H. ovata albomarginata* hort. neerl. pro parte.

cv. 'Argenteo-vittata'. Basionym: *Funkia undulata* Sieb. *argenteo-vittata* Sieb.

Cat. 1863: 45, nom. nud. et Anonymus, *Sempervirens* 20: 388, 391. 1891

Syn.: ? *F. argenteo-striata* Sieb. Cat. suppl. pl. nouv. 1862: 4, nom. nud.;
Hosta argentea vittata hort. neerl. pro parte.

H. ventricosa Stearn cv. 'Aureomaculata'. Basionym: *Funkia latifolia* [lusus] γ.
aureomaculata Miq. op. cit. 303.

Syn.: *F. ovata* fol. *aureo-maculatis* Sieb. Cat. 1856: 12, nom. nud. et Anonymus in *Sempervirens* 20: 533. 1891; ? *F. ovata* [f.] γ. *aureovariegata* Reg. Gartenfl. 25: 162. 1876; ? *Hostia coerulea* f. *aureovariegata* Voss in Vilm. Blumeng. ed. 3. 1: 1076. 1896.

SUMMARY

Many *Hostas* at present grown in Europe were introduced by von Siebold between 1829 and 1862. The names of these *Hostas* ("Funkias") and of other ones cultivated by von Siebold's Nursery between 1844 and 1887 were entered on the price lists published by von Siebold & Coy. These names are summarized in table 1.

Von Siebold never published any taxonomic treatment of the genus *Hosta*. The majority of the *Funkia* names mentioned in his catalogues remained nomina nuda till 1869, when MIQUEL's study on *Funkia* was published. This interferes with the identification of the *Hostas* cultivated by von Siebold's, as HYLANDER (1954) remarked. Yet, new results were attained by studying: the specimens in the herbaria at Leiden and Utrecht dating from von Siebold's and Miquel's time, taxonomic and horticultural publications from that time, and a collection of the *Hostas* grown in the Netherlands now. These results are published in this article. They are summarized in table 2.

In connection with these results a few names used by HYLANDER (1954) should be changed and some of the lists of synonyms proposed in that publication can be completed or should be changed. These amendments are summarized in the last chapter of this article, named "Synonymy of some *Hostas*".

SAMENVATTING

Vele van de *Hosta*'s, die thans in Europa gekweekt worden, zijn tussen 1829 en 1863 uit Japan ingevoerd door von Siebold. De namen van deze *Hosta*'s ("Funkia's") en van andere, die in die tijd in von Siebolds kwekerij in cultuur waren, zijn vermeld in de prijscouranten van von Siebold & Co., waarvan de bibliotheek van de Landbouwhogeschool te Wageningen een uitgebreide collectie bezit, daterende van 1844 tot 1887. Een overzicht van deze namen geeft tabel 1.

Von Siebold heeft nooit beschrijvingen van deze *Hosta*'s gepubliceerd. Zo bleven zijn *Funkia*-namen nomina nuda tot na zijn dood, toen een bewerking van het geslacht verscheen van de hand van MIQUEL (1869). Deze omstandigheid vormt een grote moeilijkheid voor de pogingen tot identificatie van de *Funkia*-namen uit de catalogi van von Siebold, zoals ook door HYLANDER (1954) opgemerkt werd. Toch konden nieuwe resultaten bereikt worden door bestudering van materiaal uit de tijd van von Siebold en Miquel uit de herbaria te Leiden en Utrecht, van systematische en tuinbouwkundige literatuur uit die tijd en van een collectie *Hosta*'s die een goed beeld geeft van wat thans in Nederland gekweekt

wordt. De resultaten worden in dit artikel gepubliceerd. Tabel 2 geeft er een samenvatting van.

De benamingen van enkele *Hosta*'s, gebruikt door HYLANDER (1954) zullen op grond van deze resultaten gewijzigd moeten worden. Deze gevallen en een aantal aanvullingen en wijzigingen van de door Hylander vermelde synoniemen vindt men in het laatste hoofdstuk vermeld.

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do. 1877. (Nouveautés de 1877 p. 1, *Funkia* p. 13-14).
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PL. 1. *Hemerocallis Sieboldiana*. From C. LODDIGES. The Botanical Cabinet 19: pl. 1869 (1832).



PL. 2. *Funkia Sieboldi*. From J. LINDLEY in Edwards's Botanical Register 25: pl. 50 (1839).



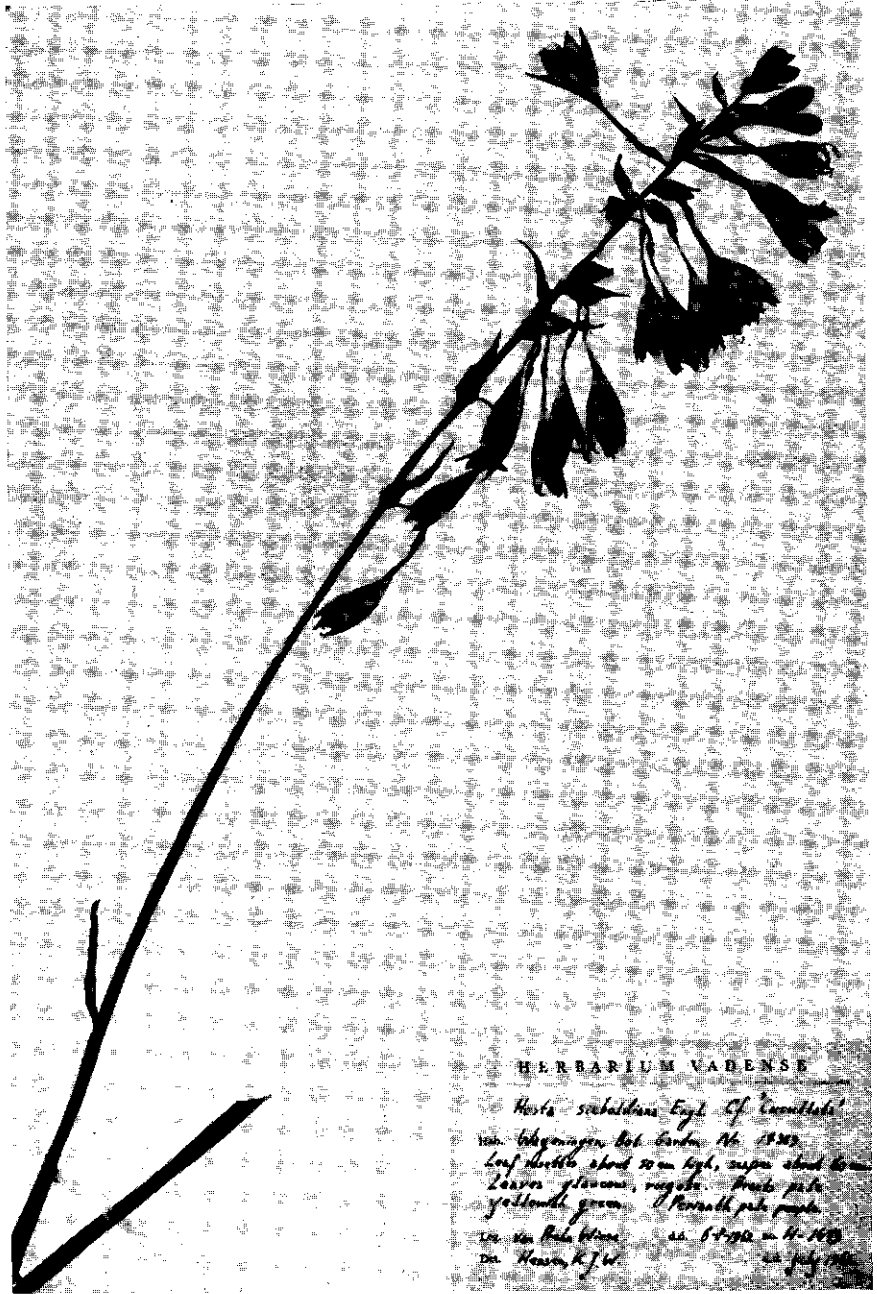
PL. 3. *Hosta sieboldiana* Engl. Cf. 'Cucullata'. Wageningen, Botanical Garden Nr. 17359.



PL. 4. *Funkia sieboldiana* Hook. β *Fortunei*. From E. REGEL in *Gartenflora* 25: pl. 867 (1876).



PL. 5. *Funkia sieboldiana* Hook. var. *glauca*. From H. WITTE. Flora [Groningen] pl. 56 (1868).



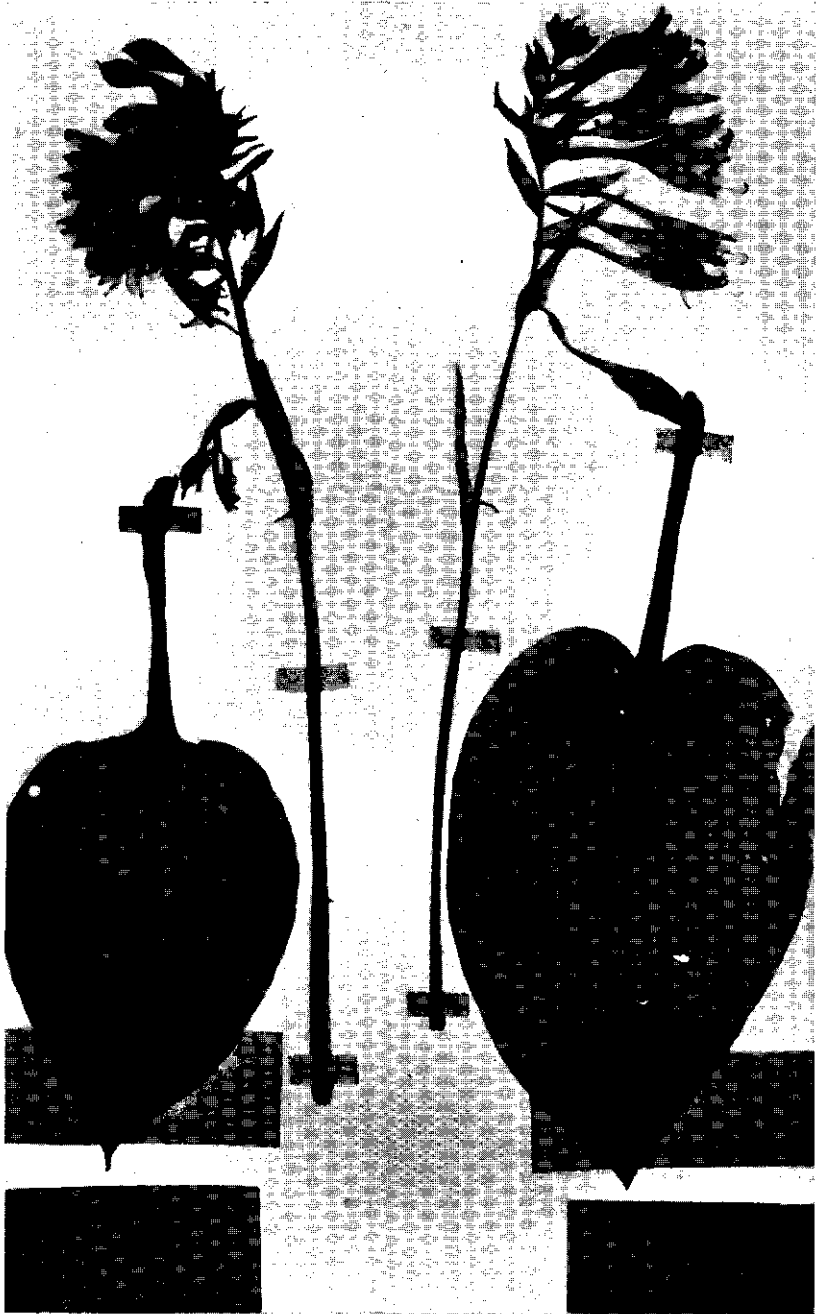
HERBARIUM VADENSE

Hosta sieboldiana Engl. Cf. 'Cucullata'

1200. Wageningen Bot. Garden No. 1822.
 Leaf sheath about 25 cm high, culm about 60 cm.
 Leaves glaucous, rugose. Bracts pale
 yellowish green. Perianth pale purple.

1200. Sin. Pula. Botani. ca. 5-7-1902. n. 11-1903.
 Dr. H. van der Velden in July 1902.

Pl. 6. *Hosta sieboldiana* Engl. Cf. 'Cucullata'. Herbarium Vadense, Laboratory of Plant taxonomy and Plant geography, Wageningen.



PL. 8. The type of *Hosta fortunei* (Bak.) Bail. in Kew Herbarium (to the left). To the right *Hosta sieboldiana* (Hook.) Engl.



HERBARIUM VADENSE

Hosta sieboldiana Engl. Cf. var. *glauca* H. Witte
 No. Vagrangen, Bot. Gard. Nr. 15543 A.
 Leaf sheath 10-15 cm high; scape 30-40 cm.
 Leaves glaucous, very rugose. ~~Both bracts ±~~
 purplish. Perianth pale purple.
 var. *Palaensis* 1911 6-7-1912 no. 11-1481
 Genoa, N.J. 61 aa July 1912

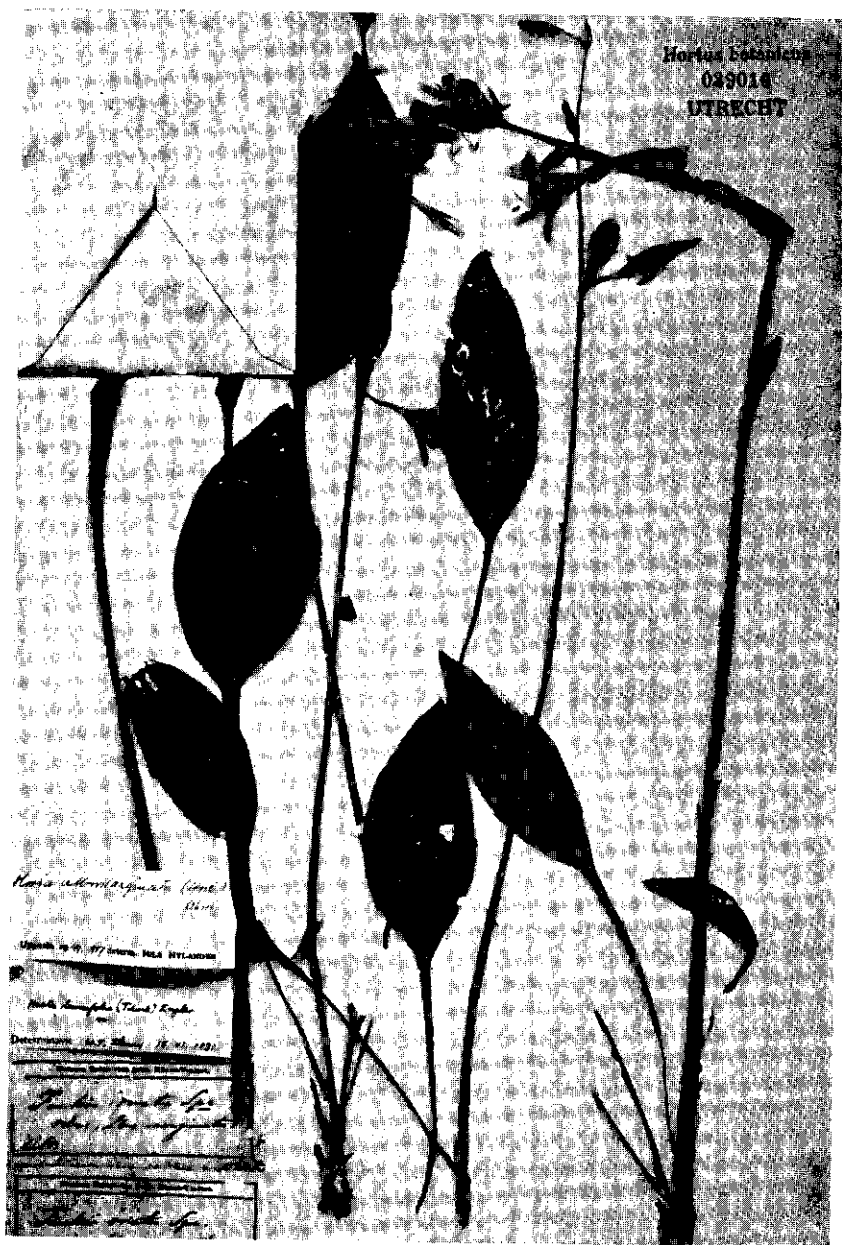
PL. 9. *Hosta sieboldiana* Engl. Cf. var. *glauca* H. Witte. Herbarium Vadense, Laboratory of Plant taxonomy and Plant geography, Wageningen.



PL. 10. *Hosta sieboldiana* Engl. Cf. var. *glauca* H. Witte. Herbarium Vadense, Laboratory of Plant taxonomy and Plant geography, Wageningen.



PL. 11. *Hosta elata* HYL., Herbarium of the Botanical Museum, Utrecht, Nr. 039020.



PL. 12. *Funkia ovata* Spr. var. *albomarginata*. Herbarium of the Botanical Museum, Utrecht, Nr. 039016.