



Disputed species

In this issue we take a closer look at the hosta varieties, which have previously been designated species, and why they have subsequently been reduced to cultivar status. We also look at variegation in hostas, and why some experts argue that variegated hosta species cannot exist...

Species re-cap

Last month we separated the list of hosta varieties, which all our references agreed were species, and listed the rest in a table.

From this table we can also remove the following varieties and classify them as species, agreed by our references, but not listed by the **RHS Plant Finder**:

h. crassifolia, *h. ibukiensis*, *h. okamotoi*, *h. takahashii*, *h. takiensis*.

So why are the rest of these varieties causing debate?

The botanical definition of a species includes those identified as interspecific hybrids. Many argue that any plant found in the wild must be a species, but this is misleading because hosta characteristics vary among wild populations. The main reason for debate is the lack of evidence that the following varieties exist as wild populations:

Name	Reasons for disagreement
'Crispula'	Cannot be found in the wild and requires propagation to retain variegation
'Decorata'	Cannot be found in the wild and doesn't come true from seed
'Elata'	Cannot be found in the wild and no true form has been confirmed
'Fortunei'	Does not occur in the wild
'Helonioides'	Still grown near where it was discovered, but only cultivated plants described - no wild populations have been found
'Hippeastrum'	Genetically unstable so would not grow consistently in the wild
<i>lancifolia</i>	See below
'Rohdeifolia'	Does not occur in the wild, but as a variegated sport of the all green species, <i>h. rohdeifolia</i> f. <i>viridis</i> , when cultivated.
'Tardiflora'	Cannot be found in the wild
'Tokudama'	Cannot be found in the wild, only as a likely form of <i>h. sieboldiana</i>
'Undulata'	Cannot be found in the wild and requires propagation to retain variegation

H. lancifolia is an interesting variety, which Schmid and the AHS have reduced to cultivar status due to the very close similarity to *h. cathayana*. The former is sterile and the latter fertile, which seems to be the basis of the argument. Both Zilis and the RHS consider it a species, with Zilis claiming to have seen pod formation (whether the pods are fertile is not mentioned). This has convinced him of its' validity as a species, distinct from *h. cathayana*. As the debate continues, and the RHS list it as a species, we will follow suit.



H. 'Tokudama'

Our favourite disputed species has to be ***h. 'Tokudama'***.



Named for its rounded leaves, it is a very slow grower but has the most wonderfully rugose, blue leaves. We featured ***h. 'Tokudama'*** back in **June 2008**, looking at the variety of cultivars that it has produced.

Website updates

Work continues apace to update all the variety pages, and the collection classification pages. We hope to have all the work done before the end of February, so please bear this in mind when you look through the pages - many plants have changed size categories.

2011 Catalogue

We will have our 2011 Catalogue ready for downloading/ordering by the end of February.

Variegated species

Some botanists disagree over whether any variegated plant can be considered a species, because variegation is a 'temporary' feature. Due to the lack of naturally occurring chlorophyll in the variegated areas of plant leaves, reversion is a typical occurrence because the cells will always try to return to their natural state. Coincidentally, the question of reversion was answered by George Schmid in the most recent Bulletin of the British Hosta and Hemerocallis Society. George says that nature will rid itself of "unnatural conditions", and variegation is such a condition. He states that, "theoretically, all variegated hostas will eventually revert. It may take a long time (more than a human life time), but nature does not count in human life times."

This doesn't mean all your wonderfully colourful variegated hosta will revert next season, but it is something to be aware of. Indeed, extremes of climate can induce reversion, so bear this in mind during prolonged wet or dry spells of weather. As ever, the best way to deal with reversion is to remove the reverted part of the plant to encourage the variegation to remain.

Returning to the list of disputed species, we find four are variegated:

Leaf	More information
 H. 'Crispula'	This cultivar has an <i>h. montana</i> background and was originally discovered growing wild. No wild populations can be found today, so we can probably assume the variegation was the result of a mutation, or sport, and reversion has happened.
 H. 'Decorata'	Also called <i>h. decorata</i> f. <i>decorata</i> and sported out of the all-green form, <i>h. 'Decorata Normalis'</i> . Cannot be found in the wild and doesn't come true from seed. This is a stoloniferous cultivar and eventually spreads quite widely.
 H. 'Rohdeifolia'	Also called <i>h. rohdeifolia</i> f. <i>rohdeifolia</i> and sported out of the all-green, species <i>h. rohdeifolia</i> f. <i>viridis</i> . The variegation does not persist in the wild and so it cannot be considered a species.
 H. 'Undulata'	Cannot be found in the wild and requires propagation to retain variegation. This cultivar is possibly the most unstable of all that we have experienced so far, with widely different amounts of white in the leaves - it is quite an interesting plant to grow for this reason.

Out of these cultivars, the one that perhaps gives the best display of white variegation is *h. 'Undulata'*, but it is the most unstable. *H. 'Undulata Univittata'* is even more delightful, when it has a much broader centre stripe of white - *h. 'Middle Ridge'* is a more stable form of this cultivar. Ultimately both *h. 'Undulata'* and *h. 'Undulata Univittata'* will revert to *h. 'Undulata Erromena'*, which is the all green version and consequently grows into a much larger mound.

Next month: Spring at the nursery - looking forward to the 2011 season...

2011 Show Season

We are pleased to announce that we will be at all the major RHS Shows this coming season, except for Chelsea. We will also be 'topping and tailing' our tour with the Harrogate Shows, so here goes:

14-17 April
Harrogate Spring Flower Show

12-15 May
Malvern Spring Flower Show

We will be in the Floral Marquee and outside

31 May
Plant Fair at Helmingham Hall

15-19 June
BBC Gardeners' World Live

We will be in the Floral Marquee and the Plant Heritage stand

5-10 July
Hampton Court Flower Show

We will be in the Plant Heritage Marquee and in Totally Plants, a new feature for the show.

20-24 July
Tatton Park Flower Show

We will be in the Floral Marquee and the Plant Heritage Marquee

16-18 September
Harrogate Autumn Flower Show

Check our **Shows page** for the latest information.

The advice and opinions contained within this monthly newsletter have been formed over more than 35 years of experience with the Hosta genus. We are constantly learning and refining that knowledge and would welcome any suggestions that readers of this newsletter would like to make so please **contact us**.

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