

A botanical name for a well-known *Hylotelephium* (Crassulaceae) hybrid

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Abstract.

A widespread hybrid of *Hylotelephium spectabile* (Boreau) H. Ohba × *H. telephium* subsp. *maximum* (L.) H. Ohba (Crassulaceae), is commonly referred to by a cultivar name, 'Herbstfreude'. A binomial, ***Hylotelephium* × *mottramianum*** J.M.H. Shaw & R. Stephenson is provided for the nothospecies.

Key words: *Sedum*; 'Herbstfreude'; 'Autumn Joy'; 'Indian Chief'; hybrids; alien plants

Introduction

Paradoxically one of the best known and most widely distributed garden sedums (stonecrops; Crassulaceae) is without a botanical name. It is *Hylotelephium* 'Herbstfreude' widely known in the UK as 'Autumn Joy' which is a literal translation of its German cultivar name. This is a similar situation to the well-known rose often labelled 'Peace' when its correct cultivar name is 'Madame A. Meilland'; in both cases the alternative name, formally referred to as a trade designation or marketing name, is better known than their established cultivar name. This *Hylotelephium* hybrid is very similar to plants called 'Indian Chief', and quite likely has had multiple origins, resulting in several named clones currently being available. Introduced to horticulture in the 1950s it has become widely cultivated in Western Europe, and is occasionally recorded by field botanists as a garden throw-out. It persists due to its drought tolerance and thermal resilience, but poses no invasive threat as it is sterile and propagates only vegetatively by fragments from stems and leaves, such as cuttings or division of the fusiform roots. Consequently it now appears in floristic literature including Stace (2019) and Sell & Murrell (2014).

Taxonomic treatment

Here we validate a botanical name for this hybrid:

Hylotelephium* × *mottramianum J.M.H. Shaw & R. Stephenson **nothosp. nov.**

Diagnosis

Plant vegetatively resembling *Hylotelephium spectabile* (Boreau) H. Ohba (Fig. 1) but with narrower, basally cuneate, more deeply serrated leaves. Further differing in the flowers in which stamens are absent or reduced to staminodes 1.5-2 mm long (Fig.

2) whereas in *H. spectabile* they are 6-7 mm long, exceeding the petals. The dark pink, fleshy sterile carpels that are longer than the cream to pale pink, semi-erect petals are present along with sepals (Fig. 3). The flowers of the clone 'Herbstfreude' are bright salmon pink aging to bronze; whereas in other seedlings they vary from cream to light pink (Groendijk-Wilders & Springate, 1995: 194).



Figure 1. *Hylotelephium spectabile* as depicted by W.H. Fitch from Saunders living collection in August 1868. (Saunders, 1868)



Figure 2. *Hylosteplemium x mottramianum* - note absence of stamens

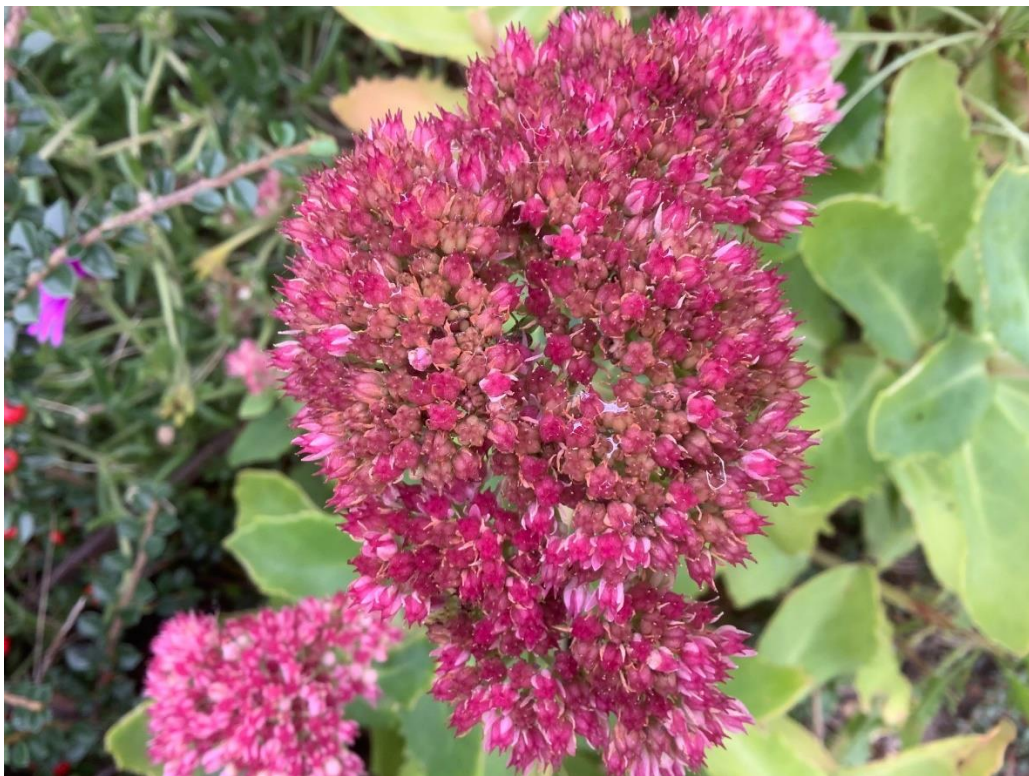


Figure 3. *Hylosteplemium x mottramianum* - older flowers with swollen coloured carpels

Original description of *Sedum* 'Herbstfreude': "Aus kreuzungen von *Sedum telephium* mit *Sedum spectabile* stammend, zeichnet sich diese Hybride durch den gedrungenen, nicht auseinanderfallenden Wuchs und die großen gewölbten, bräunlich-roten Blütenstände aus" (Arends, 1955). [English translation - Coming from crossing *Sedum telephium* with *Sedum spectabile*, this hybrid is characterized by the squat, non-spreading growth and the large, arched, brownish-red inflorescences.]

Detailed descriptions: Evans (1983: 96); Stace *et al.* (2015: 46); Stace (2019: 151); Stephenson (1994: 276); Whitehouse (2007: 6).

Holotype: Cultivated plant RHS garden Wisley, from Sedum trial beds, plant accession W841418B, 17 Sept 1998 (**WSY**). Herbarium bar code: WSY001107 (Fig. 4).

Illustrations: Evans (1983: 96); Horvath (2014: 79); Lord (2006: 245); Stephenson (1994: pl.95); Whitehouse (2007: 5, 6); Wurzell (1993: 40).



Figure 4. *Hylotelephium x mottramianum* Holotype specimen, WSY001107

Eponymy: named for Roy Mottram, 20 Aug 1940 - 17 Sept 2022. Roy, although trained as a mathematician, was an enthusiastic student of all succulent plants including cacti. His personal library was vast and he offered photocopies of rare documents by return of post. This valuable library resource has been acquired by Gibraltar Botanic Garden, and will be housed there when renovation and extension of the current library facilities have been completed. Roy was an anonymous referee for many published papers, regularly giving support to authors in order to avoid taxonomic problems. He joined the Sedum Society early in its history and immediately helped its *Newsletter* to become more professional. The authors felt this was an appropriate opportunity to recognise his contribution to the field.

History

Hylotelephium × *mottramianum* 'Herbstfreude' originated as a deliberate crossing by Georg Adalbert Arends (born 21 September 1863, Essen, Germany – deceased 5 March 1952, Wuppertal, Germany) made sometime in the late 1940s or early 1950s, at his nursery in Wuppertal - Ronsdorf, near Cologne, Germany. (As G. Arends died on 5th March and the parent plants do not bloom until September, it seems unlikely to have been made by him personally in 1952 as some authors state). His two sons continued the nursery after his death and the hybrid was later named 'Herbstfreude' in their 1955 nursery catalogue, which has an effective publication date of 10th Feb 1955. On page 8 the new *Sedum* hybrid is introduced, described and named, and on page 27 it is listed for sale along with many other *Sedum*.

Although it has been said it was introduced to UK cultivation by Alan Bloom in 1952 – possibly a typographical error (Lord, 2006), the year of commercial introduction to the UK is 1959, as it is first listed for sale in a Blooms Nurseries wholesale catalogue for the 1959-60 season. This is the place where the English translation of the German cultivar name 'Herbstfreude' as 'Autumn Joy' appears for the first time. There is a brief description and note that it is a new hybrid, although it is listed as *S. telephium* 'Autumn Joy'. The mention of 'Herbstfreude' in brackets immediately after invalidates 'Autumn Joy' as a cultivar name, and makes it a trade designation (selling name). The International Code for Nomenclature of Cultivated Plants (ICNCP) does not permit translations of cultivar names to be established nomenclaturally.

The parentage of *H. x mottramianum* is said to be *H. spectabile* 'Carmen' × *H. telephium* subsp. *maximum*, which latter taxon, now often treated at species rank as *H. maximum* (L.) Holub, was the seed parent. The hybrid is frequently encountered in cultivation, and sometimes becomes established elsewhere (Clement & Foster, 1994: 125). Evans (1983: 96) described it under *Sedum purpureum* [Link, 1821] 'Autumn Joy', the name under which it was introduced to the UK by Blooms Nurseries Ltd (Bloom, 1959). (*Sedum purpureum* Link was the name under which a selection of *Hylotelephium telephium* once was grown in the Royal Gardens in Berlin.) A synonym of 'Herbstfreude' is 'Indian Summer' which appeared as a sport in the 1960s and was said to produce larger inflorescences, but plants now grown under that name can no longer be distinguished (Fig. 5). Either arising as mutations (sports) or further remakes of the hybrid, there are now several clonal cultivars that are collectively known as the Herbstfreude Group, a name suggested by Eric Clement (Clement, 2001; Whitehouse 2007: 5). Members of this Group can be

distinguished by an absence of stamens, small petals, and large carpels with a persistent reddish-pink colour that deepens as the flowers age.

Also, one should be aware that hybrids between *H. telephium* and *H. maximum* are known from the wild in France (Tison & Foucault, 2014: 678) and may be in cultivation.



Figure 5. *Hylotelephium x mottramianum* material grown as 'Indian Chief'

Parent species

Hylotelephium telephium is native to the British Isles, and widely distributed in northern Eurasia, whereas *H. spectabile* occurs in the wild from S.W. Primorye (eastern Russia) to N. & E. China, and Korea. The story of its introduction to cultivation has yet to be uncovered in detail, but we do know it had been in cultivation long enough to become commonly encountered in the UK under the name *Sedum fabaria* by 1868 (Saunders, 1868). The horticultural name *S. fabaria* Vilmorin, appears to have originated through a misapplication of the name *Sedum*

fabaria Koch, now *Hylotelephium telephium* subsp. *fabaria* (Koch) H. Ohba (cf. Vilmorin, 1863). This was subsequently corrected by French botanist Alexandre Boreau (1803-1875) who provided the name *Sedum spectabile* in his 1866 monograph of this group in the genus *Sedum* (Boreau, 1866). It is thought that the type specimen was not preserved. Thus it appears *H. spectabile* was introduced from Japan, where it was cultivated rather than native, to France sometime during the 1850s or early 1860s.

As a point of nomenclature, the rank of the parents determines the rank of the nothospecies. Hence the classification used does make a difference to naming. So if one accepts both parents at species rank, the parentage as *H. spectabile* × *H. maximum*, then the progeny is *H. × mottramianum*. However, if other subspecies of *H. telephium* are crossed with *H. spectabile* and treated at species rank each hybrid combination would require a new binomial nothospecies. Alternatively, if they are treated as subspecies then each hybrid cross becomes a nothosubspecies of *H. × mottramianum*.

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