

Hybridisation and Cultivation of *Phygelius*[®]

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HISTORY OF HYBRIDISATION

Almost all *Phygelius* are garden worthy and, in a sunny aspect in a well drained but not dry soil, they will grow in most parts of the British Isles. *Phygelius* taxa are one of the few South African plants to be hardy in the British Isles. For a full botanical description of the taxa see Coombes (Coombes, 1988a; 1998b; 1990) and Wisley trial notes (Royal Horticultural Society, 2000).

In the early 1970s one would find only two taxa listed in nursery catalogues: *Phygelius aequalis* (a small shrub up to 1 m with four-angled stems, flowers pale-dusky-pink to red, with a yellow throat) and *P. capensis* 'Coccineus' (a form having rich red flowers, possibly no longer in commercial cultivation and not listed as a true cultivar). In the latest U.K. *Plant Finder* (Royal Horticultural Society, 2002), 27 taxa are listed as being offered by nurseries although trials at the Royal Horticultural Society Garden, Wisley, suggest that several are synonyms.

The first recorded cross was made in 1969 by John May, then curator at Wimborne Botanic Gardens, Dorset, U.K. He crossed *P. aequalis* with *P. capensis* (shrub up to 2 m in mild areas, flowers tubular, nodding, orange-red to deep red with a yellow throat). The hybrid raised was called *P. xrectus* 'Africa Queen' (syn. *P. aequalis* 'Indian Chief') This hybrid has pale red pendant flowers with a more or less straight tube.

In the early 1970s, Sir Harold Hillier retired from running Hillier Nursery and starting travelling the world in search of new plants for the Hillier Arboretum. While in Natal, South Africa, in 1973 he found growing in the wild a striking form of *P. aequalis* with pale creamy-yellow flowers and broad light green leaves. It was introduced by Hillier and also in 1973 by B.L. Burt. This form is normally found under the name 'Yellow Trumpet'.

For most of the early hybrids we can thank Hillier Nursery's Peter Dummer, propagator and a renowned plant breeder who developed five new named forms. The first, in 1974 was from *P. aequalis* 'Yellow Trumpet' \times *P. capensis*. The selected hybrid resembles 'Africa Queen' but differs in flower colour and has broader leaves inherited from 'Yellow Trumpet'. This new cultivar was named 'Winchester Fanfare'.

A serious breeding programme started in 1985 when Dummer crossed *P. aequalis* 'Winchester Fanfare' and *P. capensis*. One of the seedlings was named 'Devils Tears', which has petals coloured like drops of blood. It is sometimes sold as *P. capensis* 'Coccineus' but has much deeper red flowers and is, in fact, the darkest of the reds in the Wisley trials. Another was named 'Salmon Leap' which has superb orange flowers and is taller and more graceful than *P. capensis*.

Further introductions were made when Dummer back-crossed *P. aequalis* 'Yellow Trumpet' with 'Winchester Fanfare'. From that batch of seedlings came 'Moonraker', which resembled 'Yellow Trumpet' but with sharply toothed leaves that are a darker green. The flowers are lemon-yellow, borne on all sides of the inflorescence and it will quickly produce a second crop of flowers. In the same batch of seedlings was one plant which, though very weak, was certainly different in leaf and habit.

Like Moonraker the flowers were borne on all sides of the inflorescence. They were very slender, pale pink with deep crimson lobes which contrasted well with the yellow throat. This hybrid was named 'Pink Elf'. Wisley trials notes give the height as 75 cm but in this author's experience height is normally about half that.

The next milestone came in 1990 when Robin White, of Blackthorn Nurseries in Hampshire, U.K., discovered a cerise pink form of *P. aequalis* growing wild in the Sani Pass in the Drakensberg Mountains of Natal, South Africa. This he introduced to cultivation as 'Sani Pass' PBR Sensation Cape-fuchsia in the summer of 1998, protected by Plant Breeder Rights. It is a complete color break, unlike any thing seen since 'Yellow Trumpet' and will certainly be a useful parent in breeding in the coming years.

Stuart and Sue Roycroft, who grow a wide range of *Phygellus* in their garden in Aylesham, Kent, U.K., are also keen plant breeders and have two introductions to their credit. The first was *P. xrectus* 'Aylesham's Pride'. This has many deep fuchsia pink flowers that hang on one side of the stem, flowers are a deep pink, have a dark stem and large leaf, with deep serrated margins on the leaf edge. It is a sturdy and bushy plant and tends towards being evergreen. To be launched in 2003 with Plant Breeders Protection is *P. xrectus* 'Raspberry Swirl'. It has strong, erect, flower stems with evenly spaced flowers all round the stems facing outwards. Flower color is raspberry pink, with the ends of the petals swept back, and darker pink lobes with golden yellow tubes. Leaves are dark glossy green and stems reddish brown.

Potential for Future Development. From a marketing point of view the breeder needs to aim for strong growth which does not flop, or break when transported, repeat flowering, and at the top of the list plants of a compact habit. Flowers at a 45° angle so one can see the beautiful yellow throat. And with the possibilities of finding another 'Yellow Trumpet' or 'Sensation' in the wild many new colors could be developed.

CULTIVATION

Propagation. This author normally takes softwood cuttings in early February from stock plants grown under glass. These root very easily. The plugs are potted into 1.5-litre pots for early summer sales. Any not sold are potted into 3-litre pots the following spring.

Growing Conditions. In the wild, *Phygellus* grow in moist, sunny places, along mountain streams. Soil varies. They will thrive in gardens if they get sufficient moisture and are placed where they can spread by underground stems and can build up sufficient reserves to wean them through hard winters. Mulching will increase protection in cold areas.

Pests and Diseases. The main pest is figwort weevil, *Cionus scrophulariae*, but there are several other weevil species which cause damage. The adult is a small beetle 4 to 4.5 mm long with a snout-like projection on the head. Generally they are black, mottled with brownish-white markings. The larvae may be 5 to 6 mm long, brownish yellow with a black head. The body is coated with a greenish yellow slime. There are two generations a year. Adults emerge from hibernation in late spring and occur on host plants from May or June onwards feeding on leaves, petioles, and flowers. Larvae feed on leaves during summer, grazing only on one surface while the other remains undamaged. When fully grown, larvae construct an almost spherical

brownish to yellowish-brown parchment-like cocoon on stems and leaves. They then pupate and adults emerge 2 to 3 weeks later. A further generation is produced before the adults enter hibernation and re-appear next spring. Infested plants are disfigured and leaf tissue may eventually split. Flower buds and shoots may be destroyed. To control, spray with a contact insecticide as soon as damage is seen.

Downy mildew can be a problem in the propagation stage under polythene or glass where there light levels are low through the winter. A preventive spray should be applied.

LITERATURE CITED

- Coombes, A. 1988a. *Phygelius*. The Garden 113(8):375-379
 Coombes, A. 1988b. *Phygelius* in the wild and in cultivation. The Plantsman 9(4):233-246.
 Coombes, A. 1990. *Phygelius*, their cultivation and propagation. Growing from Seed 4(3):19-28.
 Royal Horticultural Society. 2000. Wisley Trial Report, March 2000.
 Plant Finder. 2002. Dorling Kindersley/RHS London

***Dierama*: The Harebells of Africa[®]**

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INTRODUCTION

To see a mass of *Dierama* prancing and bobbing in the breeze, or languidly leaning over a pool, staring at their own reflection on a still evening, is food for the soul. One becomes captivated — a slave to their every need (and there are many). They are among the prima donnas of the plant world and in the last few years have finally received some of the attention they deserve.

TAXONOMY AND IDENTIFICATION

Dierama have been given a range of descriptive common names including grassy bells, harebells, wandflowers, or angels fishing rods. The botanical name means funnel and refers to the flower shape. There are approximately forty-four species of this evergreen member of the Iridaceae, growing in Africa from Ethiopia to the Southern Cape, the largest diversity of species being in the Natal area. There are seven tropical species, which may well require protection in the GB&I Region.

Specific epithets such as *ambiguum*, *dubium*, and *dissimile* give a hint of past problems with identification. Today, even with the help of Hilliard and Burt (1991), identifying *Dierama* can be difficult, and some species are not easily recognised. For example if we take colour variation as described in Hilliard and Burt: *D. pictum* — perianth: light to dark mauve pink, magenta, or deep wine red, or *D. dracomontanum* — perianth: light to dark rose pink, light coral pink to red, sometimes shades of purple pink or occasionally mauve. Thus it is not possible to identify on colour alone. The persistent papery bracts surrounding the buds which vary in colour, shape, size, and venation are of some assistance in identification. Size and form are also significant details.

¹ National Council for the Conservation of Plants and Gardens National Collection Holder for *Dierama*