

New series double auriculas

Graeme P. Butler

Occasionally, by chance or cultivation, a plant appears that changes the way we look at a species or hybrid. Sometimes such newcomers increase growers' profits, but my desire to eliminate faults and improve an existing plant group was the driving force behind a hobby that started some 25 years ago and only later became my livelihood. If plant breeders could restore the scent to *Dianthus*, and increase disease resistance in roses, then why shouldn't I rise to the challenge of improving my favourite plant?



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For many years I had been collecting and hybridising double auriculas, but I wasn't entirely happy with their undesirable trait of weak flower stalks, a fault common to many plants which have been bred for extra petals and/or flower size. Then in 1994 I noticed a chance seedling which I felt sure would mark the way forward.

Fig. 1 *Primula auricula* 'Black Jack'

My plant not only surprised me by having a liberal dusting of farina, which is unusual for a double, but also short, thick, inch-tall flower stalks. It was, in fact, a mutation. The subsequently named 'Black Jack' (fig. 1) had dark, reddish-claret flowers which sat well with the silvery farina. Twelve years on, curiously, it remains the only auricula to hold Plant Breeders' Rights.



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The National Auricula and Primula Society states that all display exhibits should have their flower stems supported by a short cane, discreetly tied. This isn't practical in the commercial trade, of course! In my capacity as a professional nurseryman, I saw some hope for improvement.

Fig. 2 *P. a.* 'Lunar Eclipse'

Fig. 3 *P. a.* 'Late Romantic'Fig. 4 *P. a.* 'Purple Pip'

First, I'll outline how every cultivar was developed. It must be stressed that no auricula breeds true: with a very mixed ancestry and gene pool, almost any colour, flower size, and leaf variation can appear. Initially the plants which had the purest colours from within the chosen colour spectrum, and which had also proved to be the best growers and performers, were isolated. For an auricula fancier, this means that plants which over-offset, with excessive vegetative growth at the cost of flower-performance, or which fail to flower well each spring, are naturally discounted.

With the finest plants of the desired colour range grouped together in a cold glasshouse, bees were allowed access. Their ability to pollinate double forms cannot be

Fig. 5 *P. a.* 'Shaun'

replicated by even the steadiest of hands. With no other colours nearby, we can expect a higher ratio of plants to appear from within the narrower colour gene pool.

The first seedlings generally show a mid-way likeness to the plants used, and unwanted colour variants are duly discarded. Initially, my short-stemmed mutation, 'Black Jack', was included with the earliest F1 cultivars and, fortunately, it proved to be a powerful gene indeed.

As the first flowers opened from my initial hybrids, I felt more excited about them than any subsequent generation, and it was here that all my hopes were to be realised. Selecting the best doubles of the chosen colour was, of course, easy. But being truly honest with oneself regarding performance and the strength of the flower stems needed conviction!

With the best plants selected, the rest is plain sailing providing one doesn't lose sight of the ideal. Patience, at this stage, is your only ally. With each generation carefully selected for colour and habit, one crosses the best plants in hand back to the most desirable of the previous generation. This way, we can now fix even the paler, recessive colours without interference of stronger, and therefore more dominant, colour genes.

So after many years and assessing countless thousands of seedlings, I settled on six named plants (figs 1–5 & D). It may seem that the projects to improve the performance and habit for each of the chosen colours were well



Plant D, the final selection, named 'Pumpkin'.

The development of Auricula 'Pumpkin'.



Plant A. An unnamed Barnhaven double included in the initial selection to provide the darker gene within the yellow spectrum.



Plant B. F1 apricot show self (a show auricula in the self-colour section) shows a good result in the first generation of crosses: although single, the colour already shows progress.



Plant C. First seedling to show progress. Chosen as an important pollinator.

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planned. They were, except in the case of 'Lunar Eclipse' (fig. 2), which was a chance seedling from the 'Pumpkin' project.

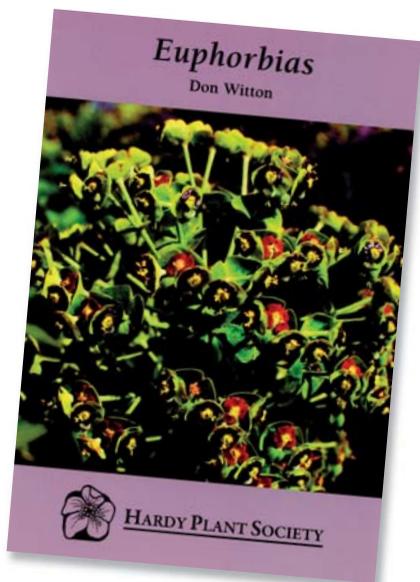
As an example, I realised that the only colour of double auricula I did not possess was orange, perhaps because one had not been bred.

It took five years to achieve. When I started the quest, I was lucky to have the rusty-brown hybrid (A). It set me thinking: if colour genetics behave a little like colours on a painter's palette, then I had on hand enough auriculas with useful colours to put it to the test. As can be seen (A, B C & D), my theory worked. Although 'Pumpkin' opens golden for the first day or two, its flowers then deepen to a rich tangerine colour.

Breeding plants takes time and patience, but the results can be very satisfying; and it's practical, even on a small scale, within an average-size garden. You may be surprised by what you can achieve! 🌸

Graeme Butler has been a keen gardener since a young boy, eventually becoming production manager for an alpine and heather plug-producing company, then manager of a garden centre, before starting Rumbling Bridge Nursery in Kinross. Its cold climate at altitude is ideal for raising his beloved auriculas.

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