## BAILEY'S BLUE POPPY RESTORED

'It bas been given to few plants to attain such popularity so rapidly and to establish themselves so firmly in the estimation of horticulturists as M. betonicifolia.'(George Taylor, 'The Genus Meconopsis', 1934).

Christopher Grey-Wilson discusses this fabled blue poppy, which was actually from China in the first instance, and its relationship with the Tibetan M. baileyi.

lthough members of the genus Meconopsis are often referred to as 'The Blue Poppies', the laurels for this accolade rest (in cultivation at least) on two species, M. betonicifolia Franchet and M. grandis Prain. While the latter is strictly a Himalayan species, M. betonicifolia (in the broad sense) inhabits a region to the north and east, ranging from south-eastern Tibet (Xizang) to north-western Yunnan in China. Both are undoubtedly exquisite garden plants and have hybridised in cultivation, resulting in a splendid range of robust garden plants. This article, however, concerns itself with just one of these species, M. betonicifolia, beginning with a brief note on its origin.

Meconopsis betonicifolia was described in 1889 by Franchet, in a publication devoted to the plant discoveries of one of the pioneering plant collectors in western China, Abbé Jean-Marie (Père) Delavay. Born in the Haute-Savoie (France) in 1834, Delavay travelled to the province of Guangdong in 1867 as a missionary (for the Missions Etrangères) and botanist. During a brief return to France in 1881 he was persuaded by Armand David, another



Meconopsis baileyi in cultivation

indefatigable collector and missionary, to collect specimens for the Paris Museum of Natural History. For the next fifteen years, with scarcely a break, Delavay amassed a considerable collection of dried plants (in excess of 50,000), a remarkable two-thirds of which were new to science. Delavay was not, however, an avid collector of living material and it was left to the famous Scotsman George Forrest to introduce many of his discoveries into cultivation.

Among Delavay's discoveries there were a number of collections of a beautiful 'blue' poppy gathered near Hoking (or Hoching, now Heqing) and at San-tcha-ho in north-western Yunnan. The description drawn up three years later by Franchet was based upon these.

However, the glowing account of its introduction given by George Taylor was not directed to plants of Chinese origin but to collections made in southeastern Tibet (Xizang). A brief résumé of its discovery here is needed in order to understand the history of the plant in cultivation and its further treatment by botanists. In 1915 Sir David Prain described a new species of *Meconopsis*, M. baileyi, based on material collected during 1913 from Lunang, in the Rong Chu valley, Kongbo at 10,500 ft in south-eastern Tibet by Colonel F.M. Bailey in the company of Capt. Morshead. Unfortunately, the material was very fragmentary (consisting of little more than a flower stuffed into a notebook) but Prain considered he had enough to justify describing it. Yet, according to George Taylor nearly twenty years later, '....the material was so incomplete and fragmentary that the author did not recognise the proper affinity of his species'. There the situation remained until June 1924 when Frank Kingdon Ward ventured into the same region, indeed to the same locality, and was able to secure ample good material.

Kingdon Ward was able to relate his material directly to that of Bailey and, on subsequent expeditions, he made further gatherings, introducing at the same time ample seed under the name *M. baileyi* Prain, although he failed to make any comparison with the Chinese *M. betonicifolia* Franchet. Kingdon Ward not only gathered material from Bailey's site but in various other localities along the divides and tributaries of the Tsangpo, and later in the adjacent region of northern Burma (now Myanmar).

Beautiful as were the meadows of the rong ..... nevertheless, the finest flowers hid themselves modestly under the bushes, along the banks of the stream. Here among spiteful thickets of hippophae, barberry, and rose, grew that lovely poppy, Meconopsis baileyi, the woodland blue poppy .... Never have I seen a blue poppy which held out such hopes of being hardy, and of easy cultivation in Britain ..... It may be remarked in passing that the only known species of *Meconopsis* which bears any close resemblance to M. baileyi are the Chinese M. betonicifolia and the Bhutanese M. superba.' (Kingdon Ward, 'The Riddle of the Tsangpo Gorges',

However, once the material was brought back to Britain it was reappraised, as related by the collector: 'We [Kingdon Ward in the company of the Earl of Cawdor] found M. baileyi in many places; in fact it was by no means rare in this part of Tibet, and I was able to take back to England complete herbarium specimens and a large packet of ripe seed. The specimens were immediately identified at Kew as Prain's M. baileyi; they supplied all the missing parts and made a complete description possible .....Now that complete specimens and, before long, living plants of *M. baileyi* were available, they were soon recognised as being identical, or almost identical, with a little-known species called M. betonicifolia. The name M. baileyi therefore became superfluous; *M. baileyi* equalled the longer-known *M*. betonicifolia, and it is highly inconvenient to have two names for the same plant. However, the name M. baileyi persisted in the catalogues of some nurserymen, because having sold the plant under that name they did not wish to change it; to do so might be bad for trade, however good for botany. Moreover, botanists, after some consultation, agreed that the new plant did not quite match the old; there are slight and possibly constant differences between them. It was therefore considered that it might be convenient to retain baileyi as a varietal name and call the plant M. betonicifolia baileyi [sic M. betonicifolia Franch. var. baileyi (Prain) Edwards nomen nudum; M. b. forma baileyi (Prain) Cotton]' (K W, 'Pilgrimage for Plants', 1960).

Kingdon Ward's introductions brought the plant firmly into cultivation and to a highly appreciative gardening public. Under the name *M. baileyi* it



Meconopsis baileyi 'Alba'

became known as Bailey's Blue Poppy, the Tibetan Blue Poppy or even the Himalayan Blue Poppy (although this latter attribution could justifiably be applied to another species, *M. grandis*). Seed was widely distributed and the plant was soon well-established in Britain and Europe, as well as Canada, the USA and New Zealand. In the July 1929 monthly record of the Royal Geographical Society, a lengthy note was submitted by Arthur R. Hinks, FRS: 'At the Chelsea Show of 1926 a superb "blue poppy", *Meconopsis baileyi*,

was shown by Lady Aberconway and the Hon. H.D. McClaren, and then first attracted general notice, though it had received an Award of Merit of the R.H.S. at their fortnightly show of the preceding April 7. In early June of the present year [1929] a large bed of the plant flowered magnificently in Kensington Gardens, within three minutes of the Society's House, and the Director of the Royal Botanic Gardens at Kew declares that it grows like a weed – which is very unusual in the beautiful flowers which have come from the Tibetan border...'



Meconopsis betonicifolia at Jiangchiang, NW Yunnan

The taxonomic position remained unchanged until George Taylor (later Sir George) published his significant monograph of the genus in 1934. Here M. baileyi is considered a synonym of the earlier species, M. betonicifolia. Taylor added, 'That the two plants are conspecific seems evident, and I have expressed the opinion that they may be regarded as geographical forms of the same species. Stapf [at Kew] has since accepted this view by identifying the cultivated plant as M. betonicifolia forma baileyi, and for the other form, on which the species was founded, he has proposed the name M. betonicifolia forma franchetii.'

The position has remained unchanged until the present day, although the two formas are not generally used. Indeed forma franchetii technically, if recognised and following botanical convention, should be forma betonicifolia. However, the fact is that the only plant produced in quantity and widely cultivated is the Tibetan plant resulting from Kingdon Ward's introductions and later those of Ludlow, Sherriff and George Taylor. Although generally listed in catalogues and other publications as M. betonicifolia, a few still hark back to M. baileyi.

Since the monograph was produced some 75 years ago further material has been collected in Tibet, notably during the various expeditions of Ludlow and Sherriff between 1933 and 1949, on occasion accompanied by Dr J.H. Hicks or George Taylor. This material has substantially increased our knowledge of the Tibetan plant and allowed further comparisons to be made with its Chinese counterpart.

Over the past five years I have been preparing a new monograph of *Meconopis* in the light of all the new material that has been collected of many of the species, particularly in western China, the Himalaya and, more recently, Tibet itself. Accompanying this plethora of herbarium material has come a great deal of fresh field data and many excellent habitat and plant photographs of them in the wild. These have been invaluable assets in reevaluating the various taxa involved.

In comparing the Tibetan-Burmese and Chinese material of *M. betonicifolia-baileyi* I have not found the merging of characters as stressed by Taylor in his monograph. Indeed his description bears some surprising oversights, most notably with regard to the size and shape of the leaves, the disposition of the stem (cauline) leaves and the shape of the fruit capsules. The differences between these plants amount to more than eight characters and these are outlined in the accompanying table.

Field observations by various people together with photographic evidence clearly show the Chinese plant to be stoloniferous. An extract from a letter penned by Stanley Ashmore (Coahuila, Mexico) to Geoff Hill (Member of the Meconopsis Group) comments as follows: '....In the fall of 2000 (??) I participated in a seed-hunting expedition headed by Dan Hinkley of Heronswood Nursery and made up of members of the Alaska Rock Garden Society. We visited a population of Meconopsis betonicifolia in north-west Yunnan in the area of Ninety-Nine Dragons Mountain [[ianchuang\*]. I observed that, although the plants were similar in some respects to the M. betonicifolia that are in cultivation, there were some remarkable differences. Some of these have been noted by you and others. Growth was odd. The plants grew in colonies rather than clumps and appeared to be aquatic in some cases ..... Since then the two "forms" - the Tibet and the Yunnan have been growing side by side in the Blue Poppy Garden outside Palmer, Alaska. We have not succeeded in making a fertile cross between the two.

	Meconopsis betonicifolia Franchet	<i>Meconopsis</i> <i>baileyi</i> Prain
Plants	stoloniferous	non-stoloniferous
Leaf whorl	absent	present
Leaf lamina base*	cordate to truncate	broad-cuneate
		to sub-truncate
Basal leaves-marginal teeth*	5-9 pairs	8-13
Basal leaves-dimensions*	65-135 × 28-67 mm	152-280 × 54-116 mm
Style length	5-9 mm	± obsolete – 3.5 mm
Stigma length	3.5-5.5 mm	3-4 mm
Fruit capsule pubescence	glabrous+	moderately to densely bristly
Fruit capsule size	25-33 × 8-9 mm	$(26-)28-40 \times 10-14$

<sup>\*</sup>Mature basal leaves only recorded

<sup>+</sup> Very rarely with a few scattered bristles along the sutures

In addition, we have had the luxury of making observations of the "Yunnan form" in the garden. The Yunnan form spreads by underground rhizomes somewhat like *M. quintuplinervia* ..... rhizomes are the size of a pencil and produce plants 6 inches [15 cm] from the mother plant.....'

\* This locality, by the main road between Dali and Lijiang (Dayan), is just west of the *locus classicus* for *M. betonicifolia* at Hoking (Heqing)

Unfortunately, these stolons have been overlooked by collectors in the past and are not present on any herbarium specimens that I have examined, very few of which have even a vestige of root.



Meconopsis betonicifolia; Loojunshan, 3500 m, NW Yunnan

With these revelations in mind I have no hesitation in reinstating the Tibet plant as a species in its own right, M. baileyi Prain. It is clearly allied to M. betonicifolia Franchet together with M. grandis Prain, M. integrifolia (Maxim.) Franchet, M. pseudointegrifolia Prain and M. sherriffii G. Taylor in Series Grandes.

The prime differences between these two taxa can be summarised as follows (these observations are based solely on wild plants and full descriptions and further observations will appear in due course with the completion of the monograph):

## Meconopsis betonicifolia Franch-

et (syn. M. betonicifolia forma franchetii Stapf, M. b. var. franchetii (Stapf) L.H. & E.Z. Bailey) Plant stoloniferous (with long underground stems in this instance) with relatively small basal leaves, these at maturity not exceeding 13.5 x 6.7 cm, with a truncate to markedly heart-shaped base, generally with no more than nine pairs of coarse teeth along the margin. Stem leaves spreading, sometimes somewhat recurved, markedly clasping (auriculate) at the base, all alternate. Inflorescence a raceme bearing up to 7 flowers, these soft rose lavender to blue-violet, sometimes with a hint of purple. Ovary glabrous (rarely with a few bristles along the sutures), with a well-developed style at least 5 mm long and extending to 9 mm in fruiting specimens. Fruit capsule narrow spindle-shaped (fusiform), narrowed evenly at both ends, not more than 33 x 9 mm, glabrous or with a few short

bristles along the sutures. Distribution: NW Yunnan, 3048-3963 m.

Meconopsis baileyi Prain. (syn. M. betonicifolia var. baileyi (Prain) Edwards, nomen nudum, M. b. forma. baileyi (Prain) Cotton). Plant clumpforming, without long underground stolons, and bearing relatively large basal leaves, these at maturity 15.2-28 x 5.4-11.6 cm, with a wedge-shaped (broad-cuneate) semi-truncated base, generally with 8 or more pairs of marginal teeth. Stem leaves ascending erect, sub-amplexicaule, uppermost 3-4 in a whorl at the stem top, the others alternate. Inflorescence subumbellate, sometimes with one or two extra flowers produced from the uppermost alternate leaves, and comprising up to 5 flowers, these light sky blue or azure to dark sky blue, occasionally flushed with purple. Ovary densely bristly, with a poorly-developed style not more than 3.5 mm long, this sometimes ± obsolete. Fruit capsule narrow, ovoid (narrowly egg-shaped), 28-40 x 10-14 mm, beset with dense, spreading rufous bristles. Distribution: SE Tibet (Tsangpo region), extending to N Myanmar, 2896-3810 m.

In hindsight it seems surprising that the Chinese plant, viz. *M. betonicifolia*, was not introduced into cultivation long before *M. baileyi*. After all, it had been discovered more than 30 years before *M. baileyi* was introduced into cultivation. In the first years of the twentieth century numerous plant collectors had been scouring western China for plants. Perhaps most notable

(apart from Kingdon Ward himself) was George Forrest who brought many of Delavay's discoveries into cultivation. After all, Forrest had systematically explored and collected in Yunnan between 1904 and 1932 and, apart from



Meconopsis baileyi photographed in SE Tibet on the Serkyim La, 3800 m



Meconopsis baileyi; SE Tibet, S of Nyima La, 3500 m

Rhododendron and Primula, Meconopsis was a genus to which Forrest would have paid particular attention (He found no less than 12 species in Yunnan!). Forrest did in fact search out and pinpoint Delavay's locality at Hoking and found the plants. But Kingdon Ward (1960, 'Pilgrimage for Plants') states that: '.... strangely enough the seeds he sent home did not do well – the little plants perished as seedlings. Nor did he find it more than once or twice. Later the American Joseph Rock collected it, but with no better result for horticulture'. Kingdon Ward (1960) added, '...One inescapable conclusion, I think, is that this particular poppy has always been rare in Yunnan. Many of the most famous introductions from western China are widespread, being found in any suitable locality over an area of hundreds, or even thousands, of square miles, but this is not one of them. The fact that George Forrest, whose welltrained Chinese collectors covered a lot of ground and missed very little, only came across the plant once or twice is sufficient endorsement of the view that M. betonicifolia is a very rare plant in Yunnan. Yet, even while making every allowance for the difficulties and uncertainties, it seems extraordinary that forty years elapsed between the first discovery of this Meconopsis and its introduction to Europe.'

The rarity of *M. betonicifolia*, stressed by Kingdon Ward, is perhaps rather overstated. The species is undoubtedly local, and although few modern collections exist (at least in European and American herbaria) there are almost 20 historical collections, mostly

gathered by George Forrest and Joseph Rock, and also several sheets of Delavay's original and earlier collections. Taken together these represent perhaps a dozen localities on the Lancangjiang (Mekong)- Jinshajiang (Yangtse) and the Lancanjiang-Chienchuan divides. On a map this forms a rough triangle from west of Weixi (Wei-hsi) in the north, Shigu and Heqing (Hoking) in the east and Chienchuan in the south, an area some 120 km north to south and 100 km west to east. Even today it can be expected to grow in additional localities within this area.

Meconopsis baileyi appears to be far more common in the wild than its Yunnanese counterpart. It has a well-marked distribution in south-eastern Tibet (collections are recorded from Kongbo Province, Tsari and Zayul) from the Tsangpo valley extending south-eastwards for some 280 km to the Seinghku valley in northernmost Myanmar (Burma).

The Burmese Alps are wonderfully rich in flowers of all kinds. Ascending the Seinghku valley, one emerged from the forest at an altitude of about 9,000 feet, into high meadow with scattered thickets of *Rhododendron*. This was not the end of the forest but the beginning of the alpine region ......In the next patch of meadow several tall poppies are opening sky blue flowers to display a shower of golden anthers in the centre. This poppy is a lovely slender sea green thing with dangling blue bubbles which swing to and fro in the breeze.

It grows in great drifts and clumps all up the open valley, streaking the jade meadows with turquoise shadows. Most people now know M. betonicifolia *Baileyi*, the famous blue Poppy of Tibet. This plant is very like it, only it grows in the open instead of in the woodland, coming out in hundreds and thousands in July, and ascending to 12,000 feet, though never growing in such serried ranks as do primulas ..... Amongst the hundreds of plants I saw in Tibet and in the Burmese Oberland, I never saw one with anything but azure blue flowers or with more than four petals' (K. W., 'Plant Hunting on the Edge of the World', 1930).

It will undoubtedly prove irksome to some gardeners (and maybe others) to learn that virtually all the cultivated material in cultivation under the name M. betonicifolia should be redefined as M. baileyi. One could say things have gone full circle as, for many years after its initial introduction, this is the name under which it was revered by the gardening public. It is to be hoped that the material of the true M. betonicifolia at present in cultivation in America, and gathered in recent years in Yunnan, will become established and allow us to admire and grow this exquisite plant in European gardens beside its more famous Tibetan cousin.

Footnote. The position of *Meconopsis* baileyi var. pratensis Kingdon Ward is unclear at the present time and requires further research.

OVERLEAF. Mt Elgon on the Kenya-Ugandan border with *Dendrosenecio johnstonii*, a tree groundsel [Photo: Plant Images/ C. Grey-Wilson]