IPOMOEA BISAVIUM

The re-discovery of an indigenous morning glory

by ***Mienkie Welman,*** *National Herbarium, National Botanical Institute, Pretoria*

In 1958, Dr. A.D.J. Meeuse* discovered a new species of *Ipomoea* from the Wyllie's Poort area of the Soutpansberg in the Northern Province. With its masses of attractive flowers covering the crowns of the supporting trees, growing from stems up to 7 m long, it is most surprising that this perennial woody climber remained undiscovered until the late 1950s. Meeuse believed that it was because the habitat was rather inaccessible until the opening of the new road to Wyllie's Poort that decade. He named it *Ipomoea bisavium*, after 'the two birds', the medical practitioner Dr. Allan Bird and his son Peter, who assisted Meeuse in collecting the flowering and fruiting type specimens in the difficult terrain of dense thorn scrub in April and May 1957. As readers of *Veld & Flora* will probably know, a species name once used in a particular genus, may never be used again, even though it may have fallen into disuse, disrepute or synonymy. It is therefore essential to find an entirely original name when describing a new species; that is not so easy when dealing with the cosmopolitan genus *Ipomoea* which has about 500 valid species and several hundred synonyms. Meeuse's choice of the very unusual name *bisavium* was rather clever!

Seeds from the type specimen were collected and planted at the Division of Botany, 590 Vermeulen Street, Pretoria. The plants flowered profusely in March and April 1958 and the famous artist of the Botanical Research Institute, Cythna Letty, prepared a lovely colour illustration. This was published as plate 1360 in the *Flowering Plants of Africa* series in 1961 (see accompanying illustration). It shows the distinctive characters of the species - the heart-shaped, triangular outer sepals, the pale pink to white corollas with the lower portion of the tube purple-mauve inside and also the seeds with very long hairs along the sharp angles forming long fan-like structures. The corolla tubes are 25-30 mm long and the open flower measures 40-60 mm across.

Meeuse and other experts on the African Convolvulaceae agreed that its nearest relative must be *Ipomoea heterosepala* from Somalia. That species almost invariably has solitary flowers and small, narrow bracts while *I. bisavium* usually has several-flowered inflorescences and elliptic, leaf-like bracts. Its habitat is dry bushveld with, amongst others, *Commiphora* (corkwood trees),, *Securinega virosa* (white-berry bush), *Toddaliopsis bremekampii* (wild mandarin) and *Aloe angelica* (Wyllie's Poort aloe). It grows in full sun on a rocky slope with a northern aspect, in well-drained, sandy, quartzite soil.. Why it should be restricted to such a small area of natural distribution is still a subject for speculation.

During its flowering time, *I. bisavium* is conspicuous from a distance, with its masses of pinkish-white flowers covering the crowns of trees and shrubs. Hence it is rather surprising that, after Meeuse's collections, we did not see it again in the National Herbarium until about 1995 when it was collected by our colleague Ms Priscilla Burgoyne. In March 1998 Mr. Norbert Hahn, friend of the National Botanical Institute and amateur botanist (author of *Tree list of the Soutpansberg, 1994*) who farms in the Soutpansberg area, collected a flowering specimen. He also took some very good colour slides of the habitat, , habit and flowers. Duplicates of these slides were donated to the National Botanical Institute and are much appreciated! So, once again it is shown that co-operation between amateur and professional botanists can only improve our knowledge of the indigenous flora of southern Africa.

In his notes accompanying Cythna Letty's water colour in *Flowering Plants of Africa,* Meeuse reported on his experiments with the cultivation of *I. bisavium.* He noted that, 'When grown from seed in Pretoria, the germination was very good and it proved fairly easy to raise. A specimen planted under a large shrub on a fairly thinly wooded north-facing rocky slope reached the top of the shrub in a few months and did not cease growing, so that its potential growth could be estimated as at least twenty feet in the first season. Another specimen, planted in deep red sandy loam under a shrub also grew quite well.. Both plants produced flowers in profusion. On the other hand, specimens growing just outside a shade-house and climbing up its south-east side grew at a much slower rate and produced very few flowers, although they probably were much better cared for than the two first-mentioned specimens. Apparently this plant needs some shade initially but will only thrive if it receives a good deal of sunlight at a later stage. It can, therefore, quite easily be cultivated by planting the seedlings under a tree or shrub with a rather lax crown (or a dead one) or by leading it up a trellis, so that later the tips of the branches receive the full sun.'

Meeuse felt that this species has some potential as an ornamental garden plant and that,, because it grows so fast and flowers in its first year, it could even be cultivated as an annual in a cool climate. However, the fairly short flowering season, from about March to May, could be a drawback.. The original description mentioned white flowers, but this was because the type specimen was collected in the late afternoon when the flowers had already wilted. Fresh flowers are very pale pink bordering on chalk-white, but have a beautiful pinkish glow when seen from a certain angle. Unlike most species of *Ipomoea,* the flowers last longer during the day and are often still fresh in the late afternoon.®

About the author and illustrator
Mienkie Weiman is a taxonomist in the National Herbarium of the National Botanical Institute in Pretoria and works mainly on the Asteraceae *(Helichrysum* and *Senecio),* Convolvulaceae, Cucurbitaceae and Solanaceae families. *Flora of southern Africa* 28 (1): Convolvulaceae by A.D.J. Meeuse & w.G. WeIman appeared in February 2000.

Cythna Letty (1895-1985) contributed about 730 plates to the *Flowering Plants of Africa/ Blomplante van Afrika* series of the Botanical Research Institute, and published her own book *Transvaal Wild Flowers/Veldblomme van Transvaal* in 1962. She is also known for the floral designs that appeared on South Africa's decimal coins in 1961.

*Meeuse's revision of the South African Convolvulaceae was published in *Bothalia* 6: 641-792, and the description of *Ipomoea bisavium* appeared in *Bothalia* 7: 26 & 27.

Left Plants from seeds ofthe type specimen of *Ipomoea bisavium* flowered profusely in March and April 1958 and the famous artist of the Botanical Research Institute, Cythna Letty, prepared this colour illustration, which was published in the *Flowering Plants of Africa* series in 1961.
Right, above The pale pink open flowers of *Ipomoea bisavium* showing the distinctive purple-mauve markings inside.
Right, below Flowers of the endemic *Ipomoea bisavium* cover shrubs and trees in the Wyllie's Poort area of the Soutpansberg from March to May.
Photos: N. Hahn.