About sticks and pencils (part 5): Euphorbia indecora N.E.Br.

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Fig. 1: A typical plant of Euphorbia indecora (RBAM1194) along the endless dirt road from Ceres to Calvinia in the Tanqua Karoo. It is here where the late Larry Leach found Euphorbia indecora and collected it as his number 14194.

Firstly, a note about the nomenclature used when referring to *Euphorbia indecora*. This species is also widely known as *Euphorbia decussata* E.Mey. ex Boiss., but the latter is an illegitimate name. This is because *Euphorbia decussata* had been used before: i.e. *Euphorbia decussata* Salisb., Prodr. Stirp. Chap. Allerton, 389, 1796, which is a synonym of *Euphorbia lathyris* L., and the later hence illegitimate *Euphorbia decussata* E.Mey. ex Boiss., Prodr. 15(2), 74, 1862. More recently Bruyns (2006) has suggested that *Euphorbia indecora* is synonymous with *Euphorbia rhombifolia* Boiss. The exact relationship of the mentioned species awaits a comprehensive review of the *Euphorbia* genus, but for this article *Euphorbia indecora* will be treated as a separate species.

Euphorbia indecora is a species fitting well into the concept of this series of anecdotes, presenting an easy to find, widespread, but little known species of succulent *Euphorbia. E. indecora* occurs, quite frequently as the

dominant species, throughout the Great Karoo, the Richtersveld and well into the Great Namaqualand in Namibia. The somewhat untidy looking bushes grow to a height of almost 1 metre, most of the time spreading broader than their height. They have a strikingly hazy grey to purple colour and once you have recognized the typical plant, you can identify it from afar.

However, this does not mean that the species concept of *Euphorbia indecora* is an easy one, as there are some closely related species that may cause quite some confusion. So let us first try to pinpoint the characteristic features of *Euphorbia indecora*. Succulent euphorbias with pencil like branches can be divided into several unrelated groups. One such group is characterized by dioecious plants which have the lateral branches and leaves placed in opposite pairs. This particular group is now placed by Ya Yang et al. (2012) in the subgenus *Chamaesyce* section *Articulofruticosae*, based on phylogenetic research. One added feature of *Euphorbia*

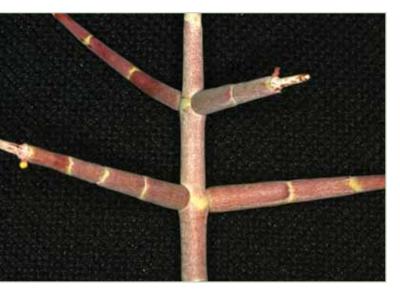


Fig. 2: The typical "decussate" branching of Euphorbia indecora (RBAM1194)



Fig. 3:The male cyathia of Euphorbia indecora, clustering in cymes along the branches (RBAM1194)



Fig. 4: The fruits of Euphorbia indecora (RBAM1194) are sessile in this case and thus differ from the description in White et al. (1941).

indecora is the interesting angle the side branches make. This feature also provided for the name '*decussata*' as they form a 'X', the Roman figure for 10. You can clearly see the way of branching in figure 2.

To the southern edge of the distribution range of Euphorbia indecora grows Euphorbia mundii N.E.Br, a smaller plant with less prominent branching habit and without the typical "decussate" branching of Euphorbia indecora. Euphorbia mundii predominantly occurs in the Little Karoo, but extends north of the Langeberge along the South edge of the Great Karoo. Here the two species mingle into one another and the line between them is hard to draw. To the northern limit of Euphorbia indecora's natural habitat one finds Euphorbia cibdela N.E.Br. This species has a puberulous involucre, compared to the glabrous involucre of Euphorbia indecora. In appearance Euphorbia cibdela is similar in size to Euphorbia indecora, but it also displays a different branching habit, having more lateral branches at the end of the stems at a smaller angle. This gives Euphorbia cibdela a more densely branched habit and thus a more untidy appearance than Euphorbia indecora.

The range of *Euphorbia spinea* N.E.Br., discussed in part 4 of this series in Euphorbia World, Vol. 7(2), overlaps significantly with that of *E. indecora*, and the two species may be closely related. *E. spinea*, however, is a much smaller species, and has dried dead ends at the tips of the branches, giving it a spiny appearance.

Despite all the similar looking species and disputed taxonomy, the typical *Euphorbia indecora* is an easily recognized plant, once you know it. When travelling through the northwestern part of South Africa or in southern Namibia you are almost certain to come across it.

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Fig. 5:Two typical plants of Euphorbia indecora (RBAM1246) from Namibia, east of the Fish River

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Fig. 6: Euphorbia cibdela (J&R503) from Rietfontein, south-east of Springbok showing untidy habit (Photo by Rikus van Veldhuisen, all others by Alma Moller)