

REVIEW OF MORPHOLOGICAL CHARACTERS

Vegetative Characters

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All of the species of Dalechampia in the Old World, and the majority of the New World species, are twining vines. Related taxa, such as Plukenetia and Tragia, and predominantly vine-like in habit. However, certain neotropical taxa are non-climbing. In sect. of the popular ornamental D. spathulata and related species Cremophyllum, plants are single-stemmed miniature shrubs ("Schopfbaumchen"). Within sect. Dalechampia, species in subsect. Caperonioides and subsect. Brevipes are branching perennial herbs or subshrubs, whereas species in other subsections are twining vines. A number of species, however, are somewhat intermediate in showing various gradations between the shrubby and climbing habits. In sect. Dioscoreifoliae, species such as D. aristolochiifolia Kunth and D. dioscoreifolia Poepp. grow as clambering vines, but are scarcely twining. Within sect. Dalechampia subsect. Convolvuloides, some species such as D. convolvuloides Lam. and D. tenuiramea Muell. Arg. are definitely twining, whereas D. schippii Standl. and D. schenckiana Pax & Hoffm. are merely scrambling or decumbent.

These differences in habit appear to reflect niches in tropical vegetation. Most climbers occur in rain forest or moist forest, mainly along forest margins or in light gaps. Shrubby species, in contrast, are at home especially in the cerrados of Brazil and other open savanna habitats. Since the species in the primitive sect. Rhopalostylis are all twining, it seems clear that the origins of non-climbing taxa have involved invasion of ecologically more demanding habitats.