

*gracilis* (A.Cunn.) W.R.B.Oliv. The shiny leaves are intermediate in size between the large leaved and small leaved coprosmas. A specimen in AK from the garden of AP Druce (AK 278451) notes "Similar to *Coprosma repens* x *C. rhamnoides*, but stipules different". Tony Druce felt that it is closely related to the North Cape endemic, *C. neglecta*, and perhaps should be a subspecies of that plant, and the one

found at Maunganui Bluff should be another subspecies.

As always, it was difficult when the time came to leave the tranquillity of Northland and the diversity of the flora.

#### Acknowledgements

Thanks to Michael Winch for his generous hospitality, to Ross Beever for identifying the fungus *Entyloma ageratina*, to Ewen Cameron for comments on *Coprosma neglecta* "Whangaroa", to Mike Wilcox for contributions and comments.

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## Flowering time in *Coprosma macrocarpa* subsp. *minor* (Rubiaceae)

Rhys Gardner

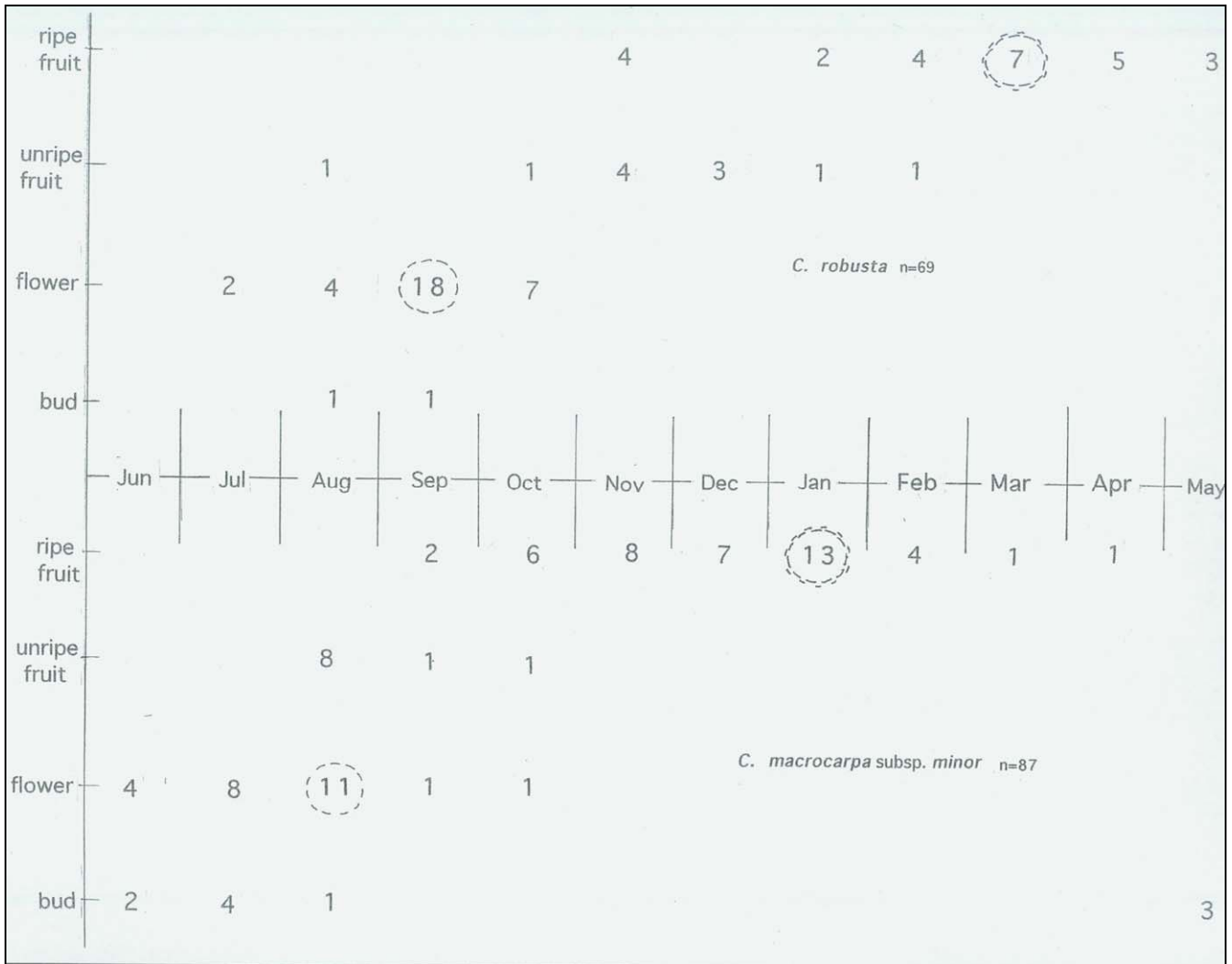
A few years ago, in the course of describing the "coastal karamu" *Coprosma macrocarpa* subsp. *minor*, I examined herbarium specimens and plotted their flowering and fruiting with respect to month. I did a similar thing for *C. robusta*, on collections that came from within the distributional range of the former, that is, north of lat. 38 deg. S.

I see now that the table as printed (table 2, Gardner & Heads 2003) contains an error: in its *C. robusta* data, the figures for "flower" have advanced to the left a month from their correct position, making it appear that these two coprosmas have their peak flowering together in August. The correct version of the table is given below (Fig. 1), showing that *C. robusta* has a September peak. This difference of a month is carried through to the fruiting stage.

Hybrids between these two coprosmas are common enough, and would no doubt be even more plentiful if both taxa did flower mainly in the same month. In fact, pure populations of *C. macrocarpa* subsp. *minor* around Auckland are hard to find, and every now and then, when I look at the type specimen I chose, from the Mt Eden rock forest, I wonder whether it is as

"typical" as it looks. Perhaps a better population to have gone to would have been the one at Mt Smart, in the planted native forest inside the perimeter fence at Church St, where this subspecies dominates the understorey. A type from Mt Smart would have been an especially appropriate choice, since this is the locality for the earliest collection, made by Thomas Kirk in 1865 (he called it *C. grandifolia*).

Also seen around Auckland now, in plantings, is *C. macrocarpa* subsp. *macrocarpa*, found naturally only on the Three Kings Islands. Its fruits are almost twice as large as those of subsp. *minor*, a difference foreshadowed in the diameter of the ovary (3 mm versus 1 mm). Peter de Lange has pointed out that subsp. *macrocarpa* seems to have its peak flowering in May, even in cultivation on the mainland, and so is reproductively isolated from subsp. *minor*. Strictly speaking, this would favour specific status for the two taxa, but I feel that a late-flowering taxon that is not to be differentiated on characters other than those of size can conveniently be kept at infraspecific level, with the trinomial nomenclature useful to indicate its (probable!) nearest relative.



**Figure 1: Table showing flowering and fruiting times in *C. macrocarpa* subsp. *minor* and *C. robusta*. From herbarium specimens, numbers indicated. Peak flowering and fruiting times circled.**

**Reference**

Gardner, R.O. and Heads, M. 2003. *Coprosma macrocarpa* subsp. *minor* (Rubiaceae), a new subspecies from northern New Zealand. *New Zealand natural sciences* 28: 67-80.

## An extension to the key and table of *Coprosma ciliata*- *parviflora* complex differences

Graeme Jane

Several people have asked me why I did not include *C. decurva* in the keys or tables in my recent paper on *C. ciliata* – *C. parviflora* complex (Jane 2005), and others why *C. pedicellata* was omitted. The first answer was of course brevity, and a second, that these two species were adequately described (Heads 1997, Molloy et al. 1999). But those were really just excuses and perhaps I should fill the gap.

The perceived need to include *C. decurva* is based on Cheeseman's broad circumscription of *C. parviflora* var. *dumosa* (and my reference to it); *C. pedicellata* was apparently unknown to him but is clearly closely related. Of the two species *C. decurva* shows marked differences from the other species of the group. In some respects it is more easily confused with *C.*

*obconica* than any other species whereas *C. pedicellata* is much more similar to the five species I treated.

*C. decurva* is usually immediately recognisable by the white, strongly decurved branches and very small more or less oblong leaves. The small red fruit are also a distinct feature but perhaps the simplest character to distinguish it from most other coprosmas is the dense, coarse, white, appressed stem hairs, especially on the young branches. Chemically, the flavonoids are quite different from all other coprosmas tested by Wilson (1984).

*C. pedicellata* closely resembles *C. parviflora* and shade forms of *C. tayloriae*. Its long-pedicellate violet