# *OLEARIA* x *CELMISIA* HYBRIDS

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This note clarifies some points on hybridization between *Olearia* and *Celmisia* about which Paul Søndegaard wrote in the C.B.S. Journal No. 26 (1992). The hybrids were raised in a garden at Milde, Norway, from seeds collected from *O. arborescens* on the Temple Basin track, Arthur's Pass, in 1975. Søndegaard thought that they might be the result of crossing between *O. arborescens* and *C. semicordata* (= *C. coriacea*). His article was first sent for publication in 1987 but through an unfortunate series of events did not appear in the C.B.S. Journal of that year.

*Olearia* x *Celmisia* hybrids had been reported as early as 1942, by G. Simpson and J.S. Thompson, in Trans. Roy. Soc. N.Z. vol. 72, pp. 21-40. They thought that the hybrid, (specimens collected by J. Speden in 1933, from a wild plant on the Avalanche Peak track, Arthur's Pass), might be the result of a cross between *O. avicenniaefolia* and *C. du-rietzii*. In fact, it is not clear which *Olearia* or *Celmisia* is involved.

In the N.Z.B.S. Newsletter No. 32 (1993) Bruce Clarkson points out that he described *Olearia* x *Celmisia* hybrids in an article in the N.Z. Journal of Botany Vol. 26, pp. 325-31 (1988). Clarkson's specimens, from wild plants on Mount Tarawera, were ascribed to a cross between *O. arborescens* x *C. gracilenta* on the grounds that both were abundant near the hybrid plants. *O. arborescens* is thought to be one parent in most cases of *Olearia* x *Celmisia* hybridization (and undoubtedly is the ovule parent for Søndegaard's specimens). To really clinch the identity of the pollen parent(s) of these hybrids, some experimentation is needed.

It is extremely interesting (and a little bit disconcerting) that such very different plants, placed in different genera, should be able to hybridize. Unless their chromosome numbers are doubled, it is unlikely that the F1 hybrids could, themselves, set viable seeds. They <u>can</u> be propagated from cuttings.

As Josephine Ward explained to us in a talk on species presently placed in *Cassinia, Helichrysum, Ewartia, Leucogenes* etc, intergeneric hybrids can provide some very useful information on the evolutionary history of plant groups.