

Figure 1 A large plant of the blue-flowered form of bacopa (*Chaenostoma cordatum*) growing at the back of a rubbish bin in 2015.

CONYZA BILBAOANA (CHILEAN FLEABANE) AS A FIREWEED IN CHRISTCHURCH FOLLOWING EARTHQUAKE CLEARANCE

Bryony Macmillan

Research Associate, Landcare Research, Lincoln

Anyone who remembers or read about the explosion of rosebay willowherb on the bombed sites of London may wonder whether such an event took place in inner city Christchurch following the clearance of earthquake damaged buildings here. My candidate for this is Chilean fleabane (*Conyza bilbaoana*) in the daisy family. Three species of *Conyza* are recorded from Christchurch district by Webb (1988). The earliest specimens found in the Allan Herbarium from Christchurch are of *C. bilbaoana* in the grounds of the Public Library (FC Allen, May 1946), *C. bonariensis* at Sumner (FC Allen, June 1946), and *C. sumatrensis* (*C. albida* in Webb 1988) in the Ministry of Works car park, Government Buildings (AJ Healy 70/184, December 1970).

Conyza bilbaoana is much the most common species. Until the publication of New Zealand Flora Volume IV with the treatment of *Conyza* by CJ Webb the plant was generally misidentified in New Zealand as *Conyza* or *Erigeron canadensis*, and was therefore called Canadian or American fleabane. T Kirk stated in the Report of the Canterbury School of Agriculture for 1882–1883 that the American fleabane *E. canadensis* was becoming naturalised about Lincoln and Springston. Now that its identity is established as the South American species, it is more appropriately called Chilean fleabane to avoid confusion with *C. canadensis* which is found in the North Island. The author of the name, EJ Remy (1849), wrote "Found in the neighbourhood of Valdivia and I dedicate it to young Bilbao, a Chilean of large geniality and much talent" (my translation).

Chilean fleabane is usually biennial in Christchurch, flat to semi-erect, ciliate leaved rosettes being present in open sites in autumn and winter. The stout taproot has many lateral roots giving stability to the erect woody stem. This becomes a much branched pyramidal panicle up to a metre or more tall, bearing copious tiny flower heads.

Prior to the earthquakes the fleabane was found in the city as scattered plants in places such as cracks in sealed footpaths and concrete gutters. Demolition of buildings requires digging out the foundations and their replacement by truck loads of infill, which is consolidated mechanically. We cannot know from where the substrate came, but there followed pioneer stands of fleabane growing densely both on unconsolidated rubble and compacted shingle. This indicates a copious supply of windblown seed responding to full light and absence of competition.

With the number of vacant sites diminishing in the city and suburbs, a greater variety of plants is seen, including the native fireweed *Senecio glomeratus* and cudweed *Pseudognaphalium luteoalbum*.

Acknowledgements

My thanks to WR Sykes, Peter Heenan and John Clemens for their consideration.

References and further reading

Molloy BJP 2005. The flora of "Nancy's Hotel" [Riccarton, Christchurch]. Canterbury Botanical Society Journal 39: 23–27.

Remy EJ 1849. *Conyza* in Gay Fl. Chilena 4(1): 75–76.

Webb CJ 1988. *Conyza*. In: Webb CJ, Sykes WR, Garnock-Jones PJ (pp 187– 191). Flora of New Zealand Volume 4. Botany Division, DSIR, Christchurch.