

Calepina, *calepina irregularis* and Turkish mustard, *malcolmia africana* - two Mediterranean weeds new to Australia.

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The annual cruciferous plants calepina or smooth ball mustard, *Calepina irregularis* (1), and Turkish mustard, *Malcolmia africana* (2), are weeds from the Mediterranean region which are now in Australia. Both plants have wide native distributions, hence are likely to spread rapidly (3) and become major weeds of farming systems in southern Australia.

### **Calepina**

Calepina is restricted to 600 ha on Yorke Peninsula, South Australia where it dominates annual medic pastures. It was first recorded in 1986, however was not mapped until 1992. It comes from southern Europe, extending from Turkey (4) to Italy (5) and Portugal where it is a common weed (5). It is a weed in North America where it is infrequent in cultivated and fallow fields (8).

One landowner reported that he spread calepina to a second property 25 km away in hay. Infested annual pastures varied from 5% to 70% calepina. Livestock avoided it. We did not find calepina in cereal crops, roadsides or fencelines. In a paddock known to be infested, the plant was not found in a barley crop, except on headlands suggesting it may not be important in cereal crops. From the abundance of plants in pastures following cereal crops, dormant seeds may enable it to escape short cereal rotations. In preliminary observations at field sites during 1992, calepina flowers from August until October, when it dies. The fruits drop to the ground as soon as they ripen. This suggests that calepina may become important in short growing season areas.

### **Turkish Mustard**

Turkish mustard is a common weed in wheat, peas and orchards in Kashmir (6), Pakistan (5) and Iran (5,7) through to the Mediterranean (4). In North America it is considered a noxious weed (8). The first Australian record of Turkish mustard was near Orroroo in 1988 (Catford, pers. comm.), although it was not investigated until 1992.

It flowers in October, with fruit forming soon afterwards. It now occurs over 500 m of roadside and in annual pasture totalling less than one hectare. We have not found it in crops. Its wide native range and experience in other mediterranean regions suggest that Turkish mustard is adapted to southern Australia.

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