Should farmers be concerned about the spread of the pasture weed water-dropwort, *oen anthe pimpinelloides?*

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Farmers and weed control authorities should develop strategies to stop spread of water-dropwort. *Oenanthe pimpinelloides.* Water-dropwort is a perennial weed of pastures from southern Europe, and is new to Australia. It is adapted to areas that are waterlogged in winter and poses a direct threat to many perennial pastures in southern Australia.

In New Zealand. it is aggressive and persistent. and has spread in Northland in the last 30 years (4). In New Zealand farmers use the herbicide picloram to control water-dropwort (Rahman pers. comm. 1991) but this is persistent and kills pasture legumes.

The first Australian record of water-dropwort was at Meadows in 1971. In 1981 8 ha was covered (Alcock, pers. comm. 1981). In 1986 it was described as adventive but insignificant (3). To establish water-dropwort's potential to invade and reduce low-lying pastures we are studying the weed and developing strategies to contain it.

Methods

From regional floras we determined water-dropwort's native range. We inspected pastures in the catchment for the Finnis River at Meadows to establish the size of the only infested area in Australia.

We tested herbicides for renovating infested pastures. After spraying herbicides, we planted a mixture of 5 kg/ha of each of Sirosa phalaris, *Phalaris aquatica,* Tamar white clover *Trifolium repens* and Palestine strawberry clover, *Trifolium fragiferum.*

Results & discussion

Water-dropwort now covers 200 ha in SA. It has spread 17 km downstream from the first outbreak. It is most abundant in pastures which are flooded in winter and grazed by cattle. It emerges from tubers before flooded soil dries, out-competing other plants.

Its wide native distribution, from Belgium, south and east to Asia minor (I) suggests it is adapted to a wide range of environments and if allowed to spread may colonise much of southern Australia (2). We found that herbicides alone will not control water-dropwort in pastures. Pasture establishment and management may reduce the impact of watcr-dropwort. Farmers should be concerned about the spread of water-dropwort.

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3. Kloot, P.M., 1986. Checklist of the introduced species naturalised in South Australia, Dept of Agriculture South Australia Technical Paper No.14.

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