STUDIES ON THE ECOLOGY OF SAND FESCUE, *VULPIA FASCICULATA*, A WEED OF SANDY SOILS IN THE MURRAY MALLEE OF SOUTH AUSTRALIA

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Abstract. Sand fescue, *Vulpia fasciculata*, (Forsskal Samp). is an annual grass weed that has emerged as a problem in the last 15 years, in both crops and pastures on the sandy soils of the Murray Mallee. It is difficult to control and is tolerant to a wide range of herbicides.

Sand fescue is a native of coastal sand dunes in Europe and some aspects of its ecology have been investigated in this habitat. Studies commenced in 1986 to investigate the ecology of this weed with a view to improving the available methods of control. Initially work has concentrated on seed dormancy, and the effect of storage conditions in the field on the length of dormancy, and on subsequent germination. Seeds of sand fescue were stored at two sites under three field conditions over summer: under cereal stubble, on a bare soil surface and buried at a depth of 2 cm in soil. An experiment to evaluate the effect of spray-topping to reduced seed-set of sand fescue in pastures, and seedling establishment in the next year, has also been carried out. Results of these experiments, along with planned experiments on the seed carryover of sand fescue will be discussed.