

## DOES MUREX MEDIC HAVE A ROLE IN THE CENTRAL-WEST OF NSW?

Martin Blumenthal and Raymond Ison  
School of Crop Sciences  
University of Sydney 2006

### Introduction

Murex medic (Medicago murex) cv. Zodiac is a new temperate annual pasture legume with an ability to grow well on soils too acid for other medics. An experiment was established on a red-brown earth at Forbes to compare the persistence and productivity of murex medic to subterranean, balansa, and Persian clover.

### Results and discussion

In the establishment year dry matter production of murex was superior to the other lines, with the number of seeds set equal to the best subclover cultivars. Hardseed breakdown over summer was slower in murex than in the other lines; as a result regeneration of murex was poor in the first year after sowing and weeds were able to invade, reducing murex dry matter production.

Provided sufficient seed was set in the first year, the advantage of hardseed in murex would become apparent following one or more dry seasons where seed production was greatly restricted. To mimic this situation a portion of each plot was sprayed out using a mixture of Roundup/Dicamba to prevent any seed set in 1988; thus only seed set in the first year (1987) could regenerate. In these sprayed out areas murex regeneration in 1989 was superior to all the other lines tested.

When grown on the heavy, red-brown earth soil, murex was able to develop more roots at depth than subterranean or Persian clover. Moreover, when grown on lighter textured soils, murex has roots deeper in the soil profile than subclover. Deep roots and/or more roots at depth may result in murex remaining green longer into spring than a subclover with similar maturity.

Murex has different management requirements to subclover for the maintenance of productivity. Once these requirements are better understood murex may have an important role to play in farming systems in the central-west of NSW.