



NATIVE GRASSES FOR THE WESTERN RANGELANDS

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Considerable effort has been put into finding grasses suitable for sowing in the semi-arid rangelands of western New South Wales. Relatively little has been done, however, to develop native Australian grasses to fulfill the same roles. Work at Trangie Agricultural Research Centre is looking at eight native grass species that have potential on either the heavy cracking clays of the Darling and tributary flood plains or the red earths of the Cobar-Bourke area. The species being studied are:

Curly mitchell grass	<i>Astrebla lappacea</i>
Common bottlewashers	<i>Enteropogon avenaceus</i>
Queensland bluegrass	<i>Dicranthium sericeum</i>
Mulga oats	<i>Leptochloa paradoxa</i>
White top	<i>Darlingtonia caespitosa</i>
Neverfail	<i>Eragrostis setifolia</i>
Redleg grass	<i>Bothriochloa macra</i>

These grasses have the potential to play a number of roles in the rangelands.

1. They may be sown after removal of woody weeds. An important aspect of an integrated woody weed control programme is management of the herbaceous layer and establishing perennial grasses is a vital part of this.
2. They may be used to improve rangelands where perennial grasses have been reduced. In many areas native perennial grasses have been almost eliminated. Replacing them is important from animal production and land conservation points of view.
3. They may be used as pasture species on cleared country after a cropping phase. Currently, there are no pasture species that can be recommended for sowing in semi-arid red soil country.

Before their potential can be realised, we must overcome problems related to obtaining seed and getting plants to germinate and establish. Towards this end, the work at Trangie is currently focussing on:

- I. obtaining adequate seed supplies for experiments and field trials;
- II. describing the germination characteristics of seed of the eight species, particularly responses to temperature and post harvest treatment;
- III. devising the technology necessary for economical establishment of pastures of these grasses;