EXTENSION AND NODDING THISTLE IN THE SOUTHERN TABLELANDS OF NEW SOUTH WALES

A.J. Dymock
Department of Agriculture, New South Wales

Nodding thistle (*Carduus nutans*) has existed in the Crookwell district since the early 1950s. Now few properties in that area are completely free of the weed. The most serious infestations occur on high fertility basalt and granite soils receiving on average over 650 mm of rain annually. Landholder recognition of nodding thistle and the problem it causes has been slow.

THE CURRENT SITUATION

Improved pastures on the better soils of the Crookwell district have been topdressed regularly with superphosphate for over 30 years. Where the perennial component of pasture has declined or was never sown, annual species such as *Bromus*, *Vulpia* and subterranean clover (*Trifolium subterraneum*) have dominated.

Perennial ryegrass (*Lolium perenne*) has been the most widely sown grass but ryegrass pastures can be readily invaded and dominated by nodding thistle.

A combination of very dry years in the mid '60s and decline in wool prices led to overgrazing and thinning of the 'annual' type pasture. This allowed nodding thistle to invade rapidly.

THE FUTURE PROBLEM

If the adverse economic situations persist in the grazing industry even less superphosphate will be used on pastures.

If stock numbers remain static, or even increase, pastures will deteriorate and be invaded quickly by nodding thistle.

THE EXTENSION PROBLEM

Declining rural income has caused landholders to divert cash for weed control to more tangible cost-benefit programs such as cash cropping.

Nodding thistle control is costly, essentially long term and requiring substantial annual expenditure.

The technical solution has concentrated on replacing nodding thistle invaded pastures with *Phalaris aquatica*, Currie cocksfoot (*Dactylis glomerata*) and lucerne (*Medicago sativa*).

The 'competing pasture' combined with strategic applications of 2,4-D and sound grazing management has given excellent control.