

## PARRAMATTA GRASS IS A SERIOUS WEED OF THE N.S.W. NORTH COAST

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*Abstract.* Parramatta grass, *Sporobolus africanus*, has been in N.S.W. since the early 19th century. Recently, it has developed into a serious weed over large areas of the N.S.W. north coast.

It competes strongly with carpet grass, *Axonopus affinis*, paspalum, and white clover pastures, partly because of its C<sub>4</sub> metabolism. Some pastures may contain more than 75% of Parramatta grass. Such infestations produce enormous amounts of seed as over 2 m seedheads/ha (each capable of producing over 300 seeds) could be produced. Hence, there is a large bank of seed available for spread.

The small, globular seed is exerted from the glumes on maturity, and perches on the outside of the inflorescence. When damp, it sticks readily to vehicles, machinery and stock. This means that the seed spreads rapidly along roads and farm tracks. Infestations on farms are usually first soon on the front drive, around stockyards and machinery sheds and along frequently-travelled farm tracks.

The digestibility of Parramatta grass is lower than that of mature carpet grass and native grasses and much lower than that of introduced forages such as lucerne hay and white clover, but is higher than that of serrated tussock, *Nassella trichotoma*.

Parramatta grass is relatively resistant to glyphosate, but excellent selective control can be obtained with tetrapion at 1.73 kg/ha. Good (non-selective) control can also be obtained with 2,2-DPA at 7.4 kg/ha. Tetrapion enables Parramatta grass to be selectively removed from pastures.

The following are reasons why Parramatta grass has been declared noxious in six shires and one county district between Bellingen and the Queensland border:

- \* competitive ability
- \* high reproductive capacity
- \* ease with which it can be spread by vehicles and stock
- \* low digestibility
- \* susceptibility to a selective herbicide

Because of the recent emergence of Parramatta grass as a weed, some aspects of its ecology required study so improved control techniques can be developed. Areas of potentially useful study include the taxonomy and possible crossing of three forms of Parramatta grass, and seed dynamics. An area of control which is poorly understood is the effect of tetrapion on seed viability and germination and on seedling survival. Other problems are that the length of the withholding period following application of tetrapion presents management problems to farmers; and the cost of tetrapion spraying and pasture improvement is very expensive compared with returns from pasture.