

PROPOSAL TO ESTABLISH A NATIONAL BUFFER ZONE TO PREVENT
THE WESTWARD MOVEMENT OF RUBBER VINE (*CRYPTOSTEGIA GRANDIFLORA*)
IN AUSTRALIA

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Rubber vine (*Cryptostegia grandiflora*) is now one of the most damaging weeds in Australia. It occupies over 600,000 ha of northern Queensland and is spreading rapidly westward. *Cryptostegia grandiflora* is not known to occur in the Northern Territory or Western Australia. However, it does have the potential to invade 58 million hectares of Northern Australia, including Arnhem Land, Kakadu and the Kimberly's.

This poster presentation will illustrate the importance of establishing this national buffer zone and why the Northern Territory/Queensland border region is an ideal area for its implementation.

DIFFERENTIAL GROWTH AND ANATOMICAL CHARACTERISTICS OF RICE AND
BARNYARDGRASS UNDER VARIOUS CROPPING PATTERNS

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This study was conducted in a greenhouse to see if there are some differences in growth and anatomical characteristics between rice (*Oryza sativa*) and barnyardgrass (*Echinochloa crus-galli*) under different cropping patterns, dry directed condition, water directed condition and transplanting condition. At 3, 5, 7, 10, 15 and 20 days after seeding or transplanting (DAS/T), plants were harvested and their growth and anatomical characteristics were examined. Difference in growth characteristics including plant height, root length, shoot and root fresh weight, leaf stage and number of root between rice and barnyardgrass was greater under dry condition than those under water condition and those of barnyardgrass was greater than those of rice under both dry and water directed condition, while rice was much greater than those of barnyardgrass under transplanting condition. Mesocotyl was formed in only barnyardgrass and its length increased with increased depth of seeding. In differential anatomical characteristics at 5 DAS/T, epidermal cell arrangement of stem and root in transverse sections was regularly dense under dry conditions, while were not regular and aerenchyma cells were well developed under water condition, and there were great difference between rice and barnyardgrass. Leaf blades were thicker in rice than in barnyardgrass, in barnyardgrass grown under dry than water conditions, and in direct seeded than in transplanted rice.