Acid Soil Action in Northern NSW

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Soil acidification in cropping and pasture areas in the higher rainfall zones of the state is an emerging major problem. Since the 1950's, research has progressively highlighted the severity of this problem and clarified the role of pasture improvement and leaching of nitrogen as major factors in the acidification process (Williams and Donald 1957; Helyar 1976).

In NSW, 13.7 million hectares of agricultural land are estimated to be seriously affected by soil acidification and a further 6 million hectares considered to be at risk (LWRRDC 1995). This amounts to an estimated annual loss of $90 m in farm income.

The Acid Soil Action (ASA) programme is an initiative of the NSW Government and involves the agricultural community, industry, various government agencies and universities. Acid Soil Action tackles the problem of soil acidity on agricultural land. A parallel project, the Acid Sulphate Soils Program (ASSPRO) is concerned with acid sulphate soils in coastal regions.

The ASA (agriculture) program is administered by 2 regional committees, Northern and Southern. These committees are responsible for initiating and managing ASA-funded projects and work closely with representatives from the farming community, agri-industry and government agencies. In Northern NSW ASA covers a wide range of agricultural enterprises and geographical regions. Its overall objectives are:

- more sustainable management of acid soils on the Northern Tablelands
- correction of acidity in cropping and horticultural areas
- recognition of acidity and its management in Northern inland areas

Since July 1997, ASA funds have been provided for over 30 projects (Table 1) which include producer-initiated demonstrations and agency research.

Table 1. Current projects being carried out under Acid Soil Action in northern NSW (total projects = 33).

Activity	Project locations
Effect of lime, fertiliser and grazing management on soil fertility, pasture quality and livestock production.	Yarrowitch, Armidale, Ebor, Glen Innes (2), Balala, Uralla, Walcha, Tenterfield.
Aspects of soil physical and chemical status after liming.	North Coast, Armidale (2), Gunnedah (3), Dorrigo, Mudgee, Northern Tablelands, Wellington.
Effects of intensive dairy pastures and hay production on soil pH and fertility.	Singleton, Tamworth.
Role and benefit of lime in cropping areas.	Dubbo (2), Coolah (2), Boggabri, Wellington (2), Narrabri, Scone.
Tolerance of native grasses to low soil pH.	Wellington.
Pasture legume adaptation and production on acid soils.	Glen Innes.
Community education, training and extension.	Armidale.

These projects are tackling a problem which represents a very significant threat to soil, land and the environment in general. Acid soils will in time affect all sectors of the community. It is hoped that the ASA program will continue well into the new millennium to ensure profitability and sustainability of our agricultural enterprises and the environment.

References

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