

Suspension fertiliser by air

Rural Air Work of Moree has introduced a new aerial application for suspension fertiliser into Australia. They have taken up the challenge to operate and develop the world wide patented system here with the eventual aim of franchising to other operators.

The patented suspension application booms fitted to Rural Air Works AT502B aircraft can apply 400 kg of solid nutrient per hectare in one pass. Under development is a pump that will give even higher rates.

Products such as lime, gypsum, dolomite, reactive phosphate rock, elemental sulphur and trace elements are ground to a 50-micron powder and combined in a specially designed mixer. A typical suspension ratio is 300 litres of water to one tonne of active nutrient and this is then pumped into the aircraft.

The patented spray gear allows this very heavy suspension to be applied without blocking the boom, as would occur with conventional spray gear. Seeds and selenium chips can be added to the suspension with out blocking the spray boom. And the system can apply large volumes of water — 400 litres per hectare compared to about 150 litres per hectare with a conventional setup.

Other advantages of the system are:

- Uniform application pattern across the field;
- Finely ground nutrient particles react more rapidly with the soil to allow quick plant response;
- Dust free application;
- On-site blending allows one pass application of the total soil nutrient needs;



- Able to meet organic registration needs;
- No soil compaction;
- Use of high analysis nutrients reduces transport costs;
- Faster than ground application; and,
- Cost effectiveness.

The application system has been used in the 2002–03 cotton season to apply finely ground gypsum, zinc and trace elements prior to planting.

Growers observed a number of differences between treated and untreated areas. One grower thought that the gypsum treated area had a longer irrigation interval than the untreated area. In all trials, there were obvious visual differences prior to picking between treated and untreated areas.

For more information contact Rural Air Work Pty Ltd., Ph: 02 6754 3599, Fax: 02 6754 3598, Mob: 0438 526 121