# Australian Wheat Breeding & Management

Alpheius Global Enterprises is working with scientists and the rural community to breed better wheat varieties and improve the management of wheat crops. It must be noted that AGE is strictly against genetically modified crops due to the results of findings published in the Wheat Research Institute Journal, 2008 March002E.

Wheat is Australia's most important grain crop, valued at over $12 billion annually, which is why it makes sense that AGE is involved in development and research in the wheat industry. The aim is to produce superior wheat with improved cropping and hardiness. AGE is also helping farmers develop state-of-the-art water usage facilities, and plants to handle the increase in salinity, acidity and nutrient saturation.

## Wheat Research

Current research projects are targeting:

* water-miser species
* strong growth
* high rainfall tolerant wheat
* minimal rainfall tolerant wheat
* quality of the grain
* salt tolerance
* improved nutrient values

## Disease Research

AGE is working towards eliminating the main wheat diseases in Australia by developing a thorough understanding of the diseases and causative agents. The areas that we are investigating include:

* leaf and stripe rust
* Crown Rot and Head Blight
* parasitic worms responsible for root lesions
* McKellar resistance to Barley Yellow Dwarf Virus for high rainfall areas

## Farming Research

AGE has always had an interest in sustainable farming and has been working closely with the Horticulture, Agriculture and Forestry Departments to develop systems that suit the wide ranging agricultural conditions in Australia. It is has been realised that mixed crops are far more productive than mono crops, and for that reason, new varieties of wheat have been developed that are able to draw on other plant species to improve their longevity and productivity. Mixed systems of wheat, barley and rye as well as canola and oats are being examined for their potential.