

WHEATS TO BE MORE DROUGHT TOLERANT

BY GEOFF THOMAS, SAGIT PROJECT MANAGER

The ability to yield under our low rainfall conditions will be one of the features of the next generation of wheat varieties to be released soon.

This is part of an initiative by Australian Grain Technologies (AGT) and funded jointly by SA Grain Industry, the SA Government Drought Initiative and the Grains Research and Development Corporation.

Dr Steve Jefferies of AGT said recently that the task of the breeder was becoming increasingly challenging because of the many changing demands.

Market requirements are changing with buyers now being highly specific in their demands – a trend which will increase even further as competition for market share increases. Whilst Australia is under pressure in some of its current markets, the up side is that through new varieties and our unique growing environment, we have the opportunity to effectively capture market share from others.

Farm systems are changing with rapid development of new tillage practices, the capacity to better use soil moisture, and the ability to be timelier with herbicide and fertilizer applications based on yield potential. New varieties are a critical part of this new “systems approach” with such things as early growth, herbicide resistance and the ability to handle root disease being of critical importance. Again it is expected that these changes in technology will continue and requires that new varieties be tested under the new systems.

The huge changes in rust resistance have created a whole new ball game for breeders in establishing new rust resistance mechanisms and this has delayed or even prevented the release of otherwise good varieties. The decision not to release Stylet is a case in point.

And then there is always the need to develop varieties which will perform well under our tough conditions as farmers seek to not only increase profit, but reduce risk.

AGT has come up with a number of varieties which look like they will do the job, at least one of which is for early release.

Currently code named RAC 1262, it has out yielded Yitpi by between 20 and 47 per cent over the last three years. It has excellent resistance to the common strains of rust and is being assess this year for its resistance to the rarer strains.

Provided it stacks up, and depending on the AWB classification (expected to be APW or AH on current indications), some seed may be made available next year, with substantial amounts being bulked up for release in 2007