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Biotechnology of Canola in Australia

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In Australia the area sown to canola continues to expand. In the last few years the area has been about 400,000 hectares but in 1997 the area could go as high as 700,000 hectares. All varieties are «spring» Brassica napus, but are sown in the early winter to fit in with the Mediterranean climate. Part of the increase in area is due to the introduction of herbicide tolerant cultivars. These cultivars are tolerant to the triazine group of herbicides and even though this trait carries the burden of decreased yield and oil content farmers are keen to use this technology.

This interest in herbicide tolerance has prompted the testing of transgenic canola with tolerance to glufosinate ammonium (Liberty Link) and glyphosate (Roundup Ready). In 1996 there were trials approved by GMAC (Genetic Manipulation Advisory Committee) to test «Liberty Link» canola in small plots. Similar

trials will be conducted in 1997 over a wider range of sites and there will also be trials of canola with the «Roundup Ready» trait.

In 1996 there were also transgenic canola trials of the PGS hybridization system and the Calgene modified fatty acid trait.

All transgenic trials conducted in 1996 and proposed for 1997 have been restricted in size and no seed harvested has been allowed to enter into the commercial market. It is expected that the first unconfined release of a transgenic canola will not be until about the year 2000.

The public debate on the release of transgenic plants in Australia has been relatively mild. A transgenic cotton variety with a Bt gene has had a large scale release and transgenic soybeans (Roundup Ready) have been imported for crushing.