

GRDC and frost event

Bill Crabtree, 19th November 2009, Letter to Editor – Farm Weekly, WA

It is pleasing that GRDC see frost as an important issue. I note that Neil Young is taking much of the credit for the recent GRDC event that gathered together those with an understanding of frost. I am disappointed that Neil's invitation list did not include anyone from the WA group who tried to launch a project on frost tolerant wheat. Much of the farming community will be aware that a company called Green Blueprint International issued a prospectus in October 2007 to try to breed wheat that is tolerant to frost. The technology that was to be used probably has the best chance of any to succeed – where genes have been isolated from Antarctic hairgrass that enable that plant to not freeze at -15 degrees C. These IRIP genes are well documented showing their strong ability to mitigate against frost.

Now what puzzles me is that Neil knew of this project, and not one of the Directors was invited or knew of the event before-hand. Sadly also, Neil Young discouraged farmers from investing into GM wheat at the 2008 Mingenew Irwin Crop Updates while this frost prospectus was still calling for investors. And then when it looked like the project would not get up GRDC did not deem the project important enough to support.

All this is confusing! Here we have a tool that really has a chance of producing the first frost tolerant wheat world-wide and it has been actively discouraged by GRDC's western panel chair. Evidence for the potential of this exciting technology is given in *Plant, Cell and Environment 2009*, page 336–48. Sadly, conventional plant breeding has been almost futile, and likely will be, in conferring frost tolerance in wheat. The most likely approach to succeed will be with biotechnology.