

Yield Prophet Season Summary – El Niño forming now has no effect on 2007 rainfall and crop yields

In 2006, forecasts based on the Southern Oscillation Index (SOI), particularly the SOI Phase System, let us know early on that in-crop rainfall in the Wimmera-Mallee was likely to be below average. Figure 1 shows probabilities of expected rainfall for July to September at the main BCG trial site (near Birchip), as forecast on 1 July of this year.

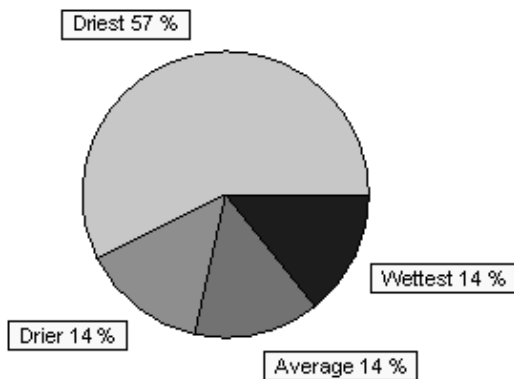


Figure 1. Rainfall probabilities for July-September forecast on 1 July of this year for the BCG main trial site near Birchip.

Whilst this information is very useful, one limitation of the SOI Phase System is that in our region it only works well as a forecast from July onward. This is too late for sowing decisions, but great for making decisions about in-crop inputs (nitrogen fertiliser, fungicides, forward selling, insurance etc.), and a good reason for delaying inputs until as late in the season as is practicable.

Timeliness of forecasts raises an important point about current talk of an impending El Niño event, and the false assumption that this will mean continued dry in the Wimmera-Mallee. What is nearly always forgotten is that an El Niño forming at this time of the year bears no relationship to rainfall in the next (2007) growing season. To prove this point, Figure 2 shows the wheat yield probabilities for 2007 predicted by BCG's Yield Prophet® for the main BCG trial site. There is very little difference in forecast yields using the last 100 years of climate data (solid line), and using those years in the last 100 that had a rapidly falling SOI phase at this time of year, which is an indicator of a forming El Niño. Statistically, there is no difference at all between the two, and we have a sporting chance of growing fantastic crops in the Wimmera-Mallee next year.



Figure 2. Yield probabilities for 2007 at the BCG main site using the last 100 years of climate data (—), or only those years in which the SOI was falling in October of the year before (···), an indicator of a forming El Niño.

It is only if the El Niño is still in place at the start of next season (May-June) that we in the Wimmera-Mallee stand a higher chance of getting below average winter and spring rainfall.