

Project: PLN00013-B

Assessment of some harvest weed seed management options for Kwinana West, Kwinana East and Esperance port zone growers

BIO:

Peter Newman from AHRI and Planfarm has lived and breathed harvest weed seed control (HWSC) for the past 16 years, to the point where he wonders if there is anything left to say about this subject! Well it seems there is. A recent national survey found that 43% of farmers are practicing HWSC, and 83% plan to be doing so in the next 5 years. After 16 years of toil we are half way there, and if the survey proves to be accurate we will see a doubling in adoption in the next 5 years. Peter is joined by Planfarm agronomists Nick McKenna and Dani Whyte to deliver this project.

BACKGROUND:

HWSC started with chaff carts and windrow burning in the late 90's. There are now six different tools on offer to farmers, none of which are perfect, but all of which are useful. The trick is to pick the right tool for the individual farmer. In recent years we have seen rapid adoption of two new tools, the chaff deck and chaff lining. There is little science evaluating these tools at present but there is a wealth of farmer observation. Regardless of which tool a grower chooses, they must maximise the weed seeds that enter the harvester, then they must set up the harvester to capture / destroy as many of these seeds as possible. This is made even more challenging in low yielding crops where weeds have lodged.

KEY POINTS:

- Western Australian growers are the world leaders in harvest weed seed control and there is ongoing innovation by farmers, engineers, agronomists and researchers in this space.
- Our ten case studies by Nick McKenna of Esperance grain growers using the chaff deck and chaff lining indicates that these are excellent, low cost tools for controlled traffic farmers.
- We delayed our work in the eastern wheatbelt for one year as this work relies on having low yielding / low biomass crops of which there were very few in 2016.

FURTHER WORK REQUIRED:

The remainder of our project will involve delivering two literature reviews, case studies in the eastern wheatbelt to identify ideas to improve weed seed capture in low yielding crops, and a series of workshops on harvester set up.

