CRDC9C (2)

(27) ATTACHMENT D

PLAIN ENGLISH SUMMARY

(not to exceed more than 200 words)

How efficiently irrigation water is used is a key issue for the Australian cotton industry. For the individual producer the focus is to maximise returns from a limited resource. However, the increasing debate on water allocation between the domestic, agricultural and environmental purposes, and to different industries within the agricultural sector, imposes additional significance to water use efficiency at the industry level.

In this study we aim to assess the current water use efficiency of the industry by analysing the water use data currently being collected by producers. Data from approximately twenty producers will be analysed. The properties will be selected to include producers from the range of irrigated cotton growing areas from Warren to Emerald, so as to represent the industry as a whole. Currently few producers monitor water use efficiency on their properties. Among those who do, the methods of calculation vary. A computer software package will be developed to encourage the keeping of good water records and to provide standardised approaches to the calculation of water use efficiency. This will facilitate the comparison of a producer's performance to industry standards and to the performance of other producers.

Water use by irrigated crops is modified by cropping history. Fallow water storage can contribute to water use efficiency by substituting for water which would otherwise be provided by irrigation. Paddock history can also effect water use by effecting how the roots explore the soil profile. The value of these contributions for water use efficiency of irrigated cotton will be assess by analysing the results from the CRC farming systems trials.