

DEFINITION AREA WIDE MANAGEMENT 1999 - 2000

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DEFINITION

Put simply, Area Wide Integrated Pest Management is the combined effort of a number of farmers and their advisers to manage pests using all the tools available with minimum impact on beneficial insects, the environment or their neighbours.

EVOLUTION

Since the success of the Boggabilla Landcare IPM Group in the 98/99 season, there has been a proliferation of new Area Wide Groups throughout the cotton industry, there is in excess of 20 groups now formed.

The goals of these groups and their degree of activity is quite variable but, most started with a similar objective to reduce their reliance on conventional chemistry and reduce their impact on each other.

THE MACINTYRE VALLEY THIS SEASON

Most of the growers in the Macintyre were involved in Area Wide Management Groups this season with four groups between Goondiwindi and Boomi. The Boggabilla Group and the Callandoon Group have remained the most active all season.

Trap cropping was used by some farmers in most groups with generally good results. Different crops were tried as consultants experimented and tried to find the most effective and user friendly crop.

The most obvious lesson of this season is that the trap crop must be as attractive as possible to be effective and timing of the crop is important.

Trap cropping may or may not reduce the insect pressure on the cotton but is likely to have a positive effect on resistance management.

Insect pressure was low in general in the Macintyre and pesticide use was also low, with an average of six sprays on conventional and 1.5 sprays on INGARD® was common.

The noticeable change in the valley was the reduction in disruptive chemistry for most of the season, with very minimal use of SP's until late January. This resulted in significant beneficial activity throughout the season, in particular predatory wasps.

Stage 3 pressure was very low and we are now asking, was the soft approach the reason for the low pressure late season.

Pupal sampling indicated high levels of pupal parasitoids which would have reduced the *Heliothis* emergence from under the crop which is normally a major source of *H. Armigera*.

Once again crop compensation was good with low fruit retention at flowering not affect yield or maturity as much as Nitrogen rates did.

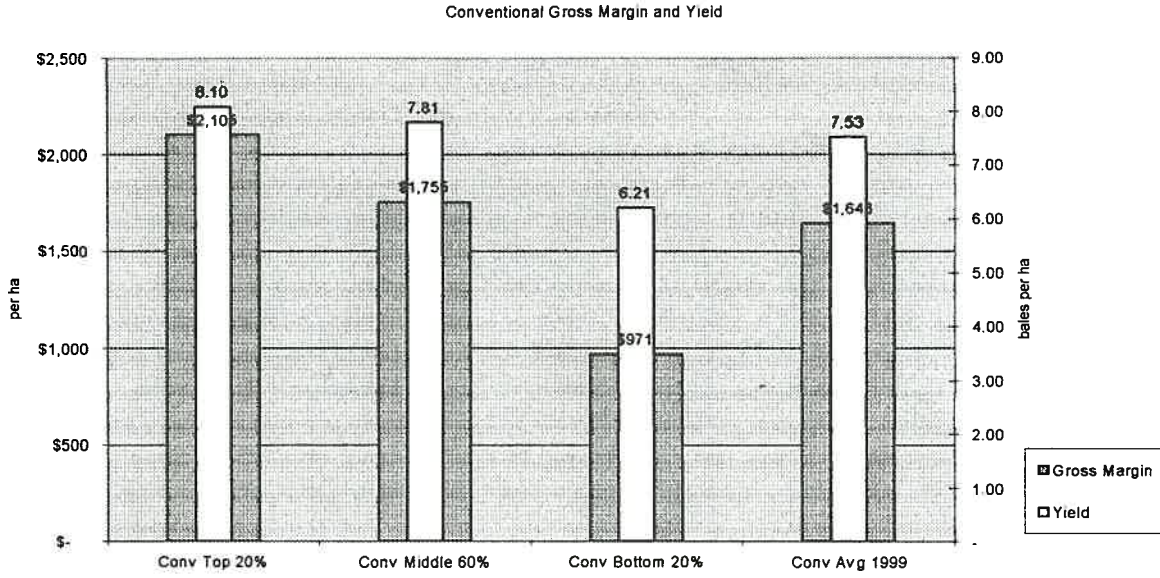
QUANTIFYING THE SUCCESS OF AREA WIDE MANAGEMENT

It is extremely hard to show how successful a group is and what impact they have had on pest management and costs.

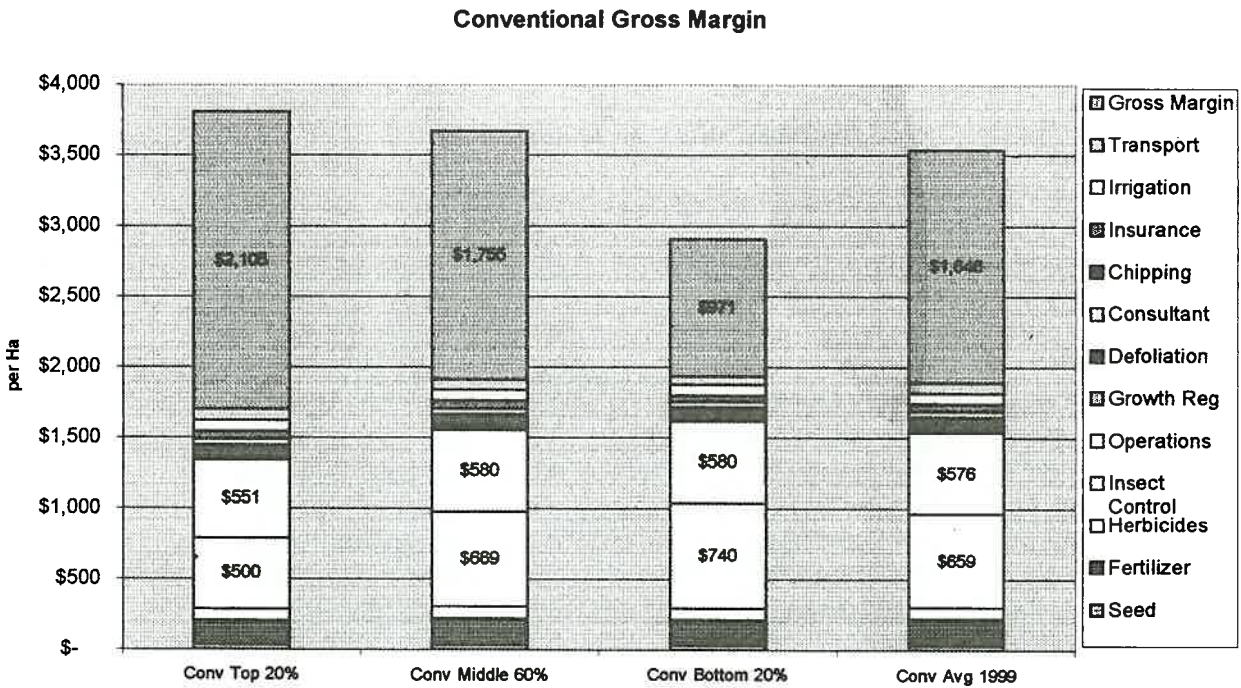
For this reason three groups in the Macintyre have employed Wicks Consulting to determine the benefits and facilitate the implementation of Area Wide Management.

Chris Wicks collects the data from cotton growers on their returns, costs and methods of production on a per field basis and then analyses this data to provide gross margins which can be used for benchmarking.

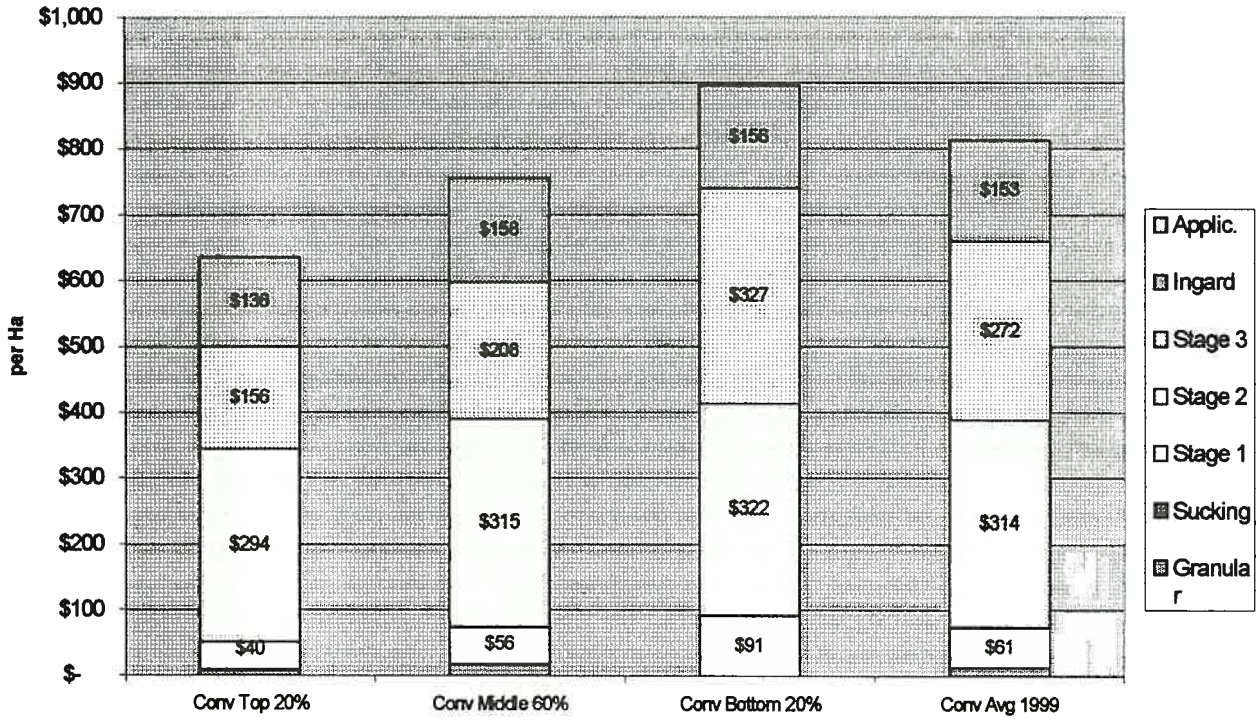
The following results are for the Boggabilla Groups for 98/99 season. The 99/2000 season is still being compiled.



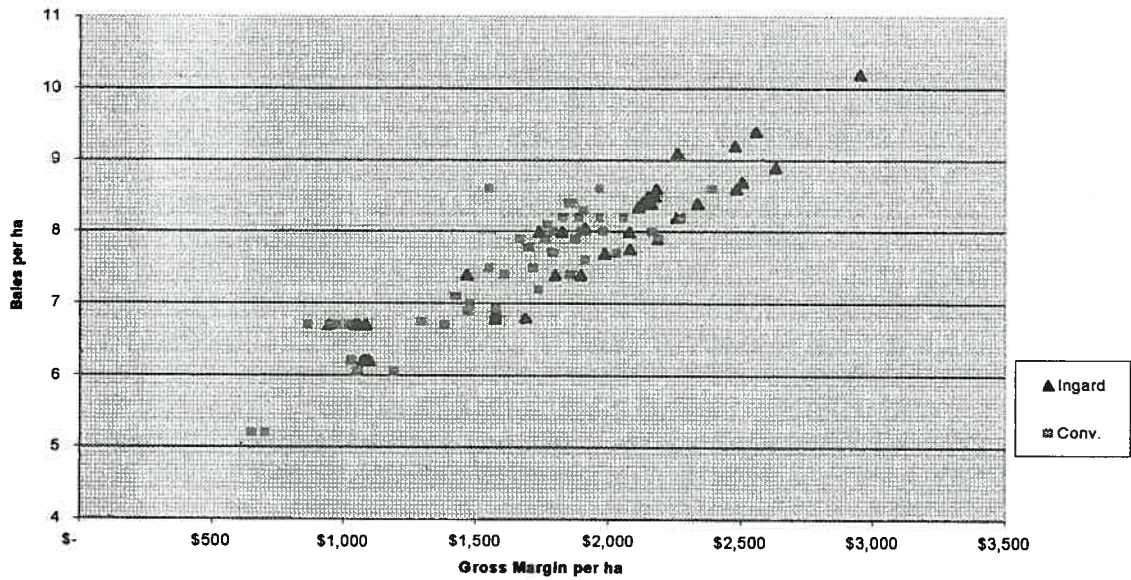
The yield for the top 20% of fields was 7% higher than the average, while the Gross margin for the same fields was 22% higher than the average.



Conventional Insect Control Costs



Boggabilla Yield V Gross Margin 1999



Nitrogen Rate Vs Gross Margin

