GROWING PIMA IN AUSTRALIA- A Perspective

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The question is asked - Why grow Pima in Australia? There are different answers. The most obvious is the economic consideration, then there is the challenge of doing something new and different. For the sake of this discussion the economic considerations will be outlined, then the management/agronomy of Pima will be compared to Upland and advantages and disadvantages of Pima will be put forward.

Economic reasons for growing Pima

At the time of writing, July 1992 Upland cotton is trading at spot price US 59 cents ex-ginyard equating to A$390/bale ex-ginyard. Pima on the other hand is expected to bring US 90 cents or A$600/bale. As Pima yields 65 to 90 percent of Upland, all things being equal, Pima will gross at least the same as Upland with the potential of doing better. It was the sums which stimulated the interest into Pima production. A full economic analysis will follow.

Management of Pima

Sowing

Pima seeds are larger than Upland (approx 7000/kg v's 10000/kg). Consequently sowing Pima into moisture needs to be watched closely as marginal moisture conditions may not get the cotyledons out of the ground. The larger seed needs more moisture to germinate them. The safest option is to flush up. Plant stands under 60000 plants/ha appear to reduce yield potential. Ideal plant stands are 100000 to 150000 plants/ha.

crop. The range of yields this season went from 2.2 bl/ac to 3.6 bl/ac. These are similar yields in terms of percentage of Upland as the better Pima growing states in the US.

Advantages and Disadvantages of Pima

The advantage of growing Pima cotton is the potential to make a profit even when the price of Upland cotton is breakeven. Even though Pima prices do not directly follow Upland prices the trends are similar, ie. when the Upland price rises or falls the Pima price will follow to some extent but not always in the same proportion. As the growing cost of Pima is very similar to Upland, so long as a good yield is obtained more profit can be made from growing Pima than from growing Upland. This is illustrated in the following tables.

Table 1. Gross Margin for Pima at different yields and grades.

	Grade and price/bale after ginning				
yield bl/ac	Grade 5 $300.00	Grade 4 $407.00	Grade 3 $493.00	Grade 1&2 $533.00	Price rise $670.00
2.2	660.00	895.40	1084.60	1172.60	1474.00
2.4	720.00	976.80	1183.20	1279.20	1608.00
2.6	780.00	1058.20	1281.80	1385.80	1742.00
2.8	840.00	1139.60	1380.40	**1492.40**	1876.00
3	900.00	1221.00	1479.00	1599.00	2010.00
3.2	960.00	1302.40	1577.60	1705.60	2144.00
3.4	1020.00	1383.80	1676.20	1812.20	2278.00

Table 2. Gross Margin for Upland at different yield and prices.

yield	Price /bale after ginning				
bl/ac	$300.00	$350.00	$400.00	$450.00	$530.00
2.6	780.00	910.00	1040.00	1170.00	1378.00
2.8	840.00	980.00	1120.00	1260.00	1484.00
3	900.00	1050.00	1200.00	1350.00	1590.00
3.2	960.00	**1120.00**	1280.00	1440.00	1696.00
3.4	1020.00	1190.00	1360.00	1530.00	1802.00
3.6	1080.00	1260.00	1440.00	1620.00	1908.00
3.8	1140.00	1330.00	1520.00	1710.00	2014.00

As can been seen from the highlighted figures in Table 1 and Table 2, at average yields and prices for this last year, Pima will return roughly $370/ac more than Upland. If Upland cotton was sold forward last year for $450/bl after ginning and Pima was grade 3 and not 2, then Pima would return minus $60/ac compared with Upland. The reality this year is; Pima is presently being classed mostly at grade 2 and the Upland price is less than $400/bl after ginning.

Another down side of Pima is rain. Rain results in significantly reduced grades and yields and with real bad grades there is question whether the cotton will be sold anyway. In previous trials, Pima with 10 inches of rain classed at grade 5 and 6, as yet this cotton has not been sold. From Tables 1 and 2 Pima at 2.4 bl/ac and grade 5 returns $720/ac versus Upland at 2.8 bl/ac and $300/bl returns $840 ac. If the price of Upland goes up and Pima does not then the losses of Pima will be much greater.

The main marketing disadvantage of Pima is due to the lack a futures market. The seller and the mill must agree on the same price on the same day before the cotton can be sold. Hence the risk of exposure to the markets is much greater to the Pima grower especially if it rains at harvest.

Agronomically if Pima is grown without enough heat and finishes when it is cool, it is very difficult to defoliate and some bolls may not open. Furthermore their would be a chance the staple length would drop below the acceptable length of 44.

The Future

Pima cotton definitely has a place in the Australian cotton industry There can be greater risks growing Pima but as long as the grower is aware of them the positive points of growing Pima means it is here to stay.