

The production line approach (PLA)

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Method

"Ricecheck" and "The Irrigated Wheat Five Tonne Club" are the names for objective total management approaches being used by farmers in Southern New South Wales irrigation areas and districts. They are examples of a new extension method for increasing crop productivity. Ricecheck and the Five Tonne Club follow a number of simple production steps aimed at improving yields and profitability for any crop or pasture enterprise. Steps are:

1. Setting of a target yield or stocking rate or productivity increase.
2. Objective recommendations to achieve the target.
3. Measurable target yield components to allow paddock checking.
4. A paddock record to be filled in during the growing season.
5. Paddock checking by farmers.
6. Corrective action to achieve target.
7. Completion of paddock records including yield/stocking rate obtained.
8. Analysis of paddock records by farmer advisors or consultants to identify factors decreasing or increasing yield.
9. Updating of the objective recommendations before the next growing season.
10. Preseason feedback to farmers.

The most important steps in PLA are steps 2, 3 and 5. By making recommendations objective they are more clearly defined for farmers and advisors. Farmers can compare their paddock checks with the recommended objective values applying to the target yield or stocking rate. Factors which either decrease or increase yield can be clearly identified. Factors limiting yield can be eliminated by updating the recommendations before the next growing season. At the end of the production cycle yields/stocking rates/profits can be readily compared between individual farmers or groups, allowing easy evaluation of progress from year to year.

Results

PLA has highlighted that there is no one single agronomic input or recommendation which alone increases yields. To increase yields farmers need to carry out all the objective recommendations and achieve the target Yield components. The relative importance of each recommendation in increasing yield will only be known at the end of the production cycle with the relativity changing from season to season.

PLA has increased irrigated wheat yields from 2.5 tonnes/hectare to 3.8 tonnes/hectare in 1984 and 1985 dropping to 3.3 tonnes/hectare in 1986 due to severe disease incidence. About 80 farmers were in the 1986 Finley Five Five Tonne Club with clubs being run in other districts.

Ricecheck increased yields by 15-20% following commercial testing by 29 farmers in the 1985/86 season. In the 1986/87 season Ricecheck has already been fully or partially adopted by at least 200 farmers located throughout the New South Wales ricegrowing districts.