DAIRY CATTLE - WORKING SESSIONS

DISCUSSION and CONCLUSIONS

BASIS OF PAYMENT FOR MILK TO THE PRODUCER

In the interest of the genetic development of the Australian dairy cattle population, the basis of payment for milk should be the yield of milk fat and/or protein with or without adjustment for volume. Payment structures should not include any minimum level of milk constituents. This recommendation is based on the genetic antagonism between the yield of milk and its constituent percentages, and the consequent problems created for the industry in striving to improve per animal productivity.

INDUSTRY SUPPORT

The importance of genetic parameters of consequence in dairy cattle breeding programs and the on-going nature and design of such programs are not sufficiently understood by industry. This lack of understanding prevents clear definition of objectives and over-emphasizes secondary traits when herd replacements are being selected. Efforts should be made by all parties to improve this position.

BREEDING OBJECTIVES

Research is required to define specific breeding objectives for the various Australian dairy cattle populations. Useful definitions of objectives cannot be achieved without an adequate forecast of land and animal usage, and of patterns of production and marketing in the future. This matter should be given early attention.

When specific breeding objectives have been determined, selection criteria can be accurately computed and their correlation with the breeding objectives maximized. Where the economic outcome is sensitive to changes in the genetic parameters, work to obtain more precise estimates of these parameters is required.

SELECTION CRITERIA FOR CHARACTERS OTHER THAN MILK, FAT AND PROTEIN

The lack of reliable data is a major constraint in the use of many traits as selection criteria. These traits include: temperament, heifer retention rate, ease of milking and milking rate, type and utility characters, disease resistance, persistency of lactation, feed conversion efficiency, milk components such as protein fractions and fatty acids, and semen fertilizing capacity.

Research is required to:

* Identify the traits which are sufficiently important for inclusion among selection criteria

* Develop technology to measure with sufficient accuracy these characteristics for individual animals.

* Reliably estimate the appropriate genetic parameters.

The proper monitoring of populations under selection will document any changes in these characters and also generate useful research data on which objective breeding programs can be based.

OTHER NATIONAL INITIATIVES REQUIRED

a) There is a need to define minimum frequencies for recording production characters (milk and its components) to provide estimates of sufficient accuracy for bull and cow selection.

b) Compatability is necessary in the nature, measuring and format of information which is potentially required for transfer between data processing systems.

c) Early adoption of a national system of sire identification is strongly sought.

d) Any commitment by the majority of AB organizations to the inclusion of only registered animals in bull teams will be difficult to attain unless there is a significant increase in the use by the stud industry of performance recording and of superior AB sires and a widening of acceptance of animals into registration. It is recommended that a working group including industry representatives be appointed to:

   * Investigate and identify the problems associated with achieving increased participation in performance recording and wider acceptance of AB animals by the stud industry.

   * Define ways and means of assisting the industry towards these ends.

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