

**ABSTRACTS**  
**\* Author Presenting Paper**

**11 What can animal breeders and corn breeders learn from each other?** K. G. Boldman\*, *Monsanto Company, Savoy, IL.*

In both commercial animal and corn breeding programs, the objective is to choose superior individuals or lines to: 1) produce germplasm or hybrid progeny for current sale, and 2) produce future generations. In corn breeding, inbred lines are crossed to produce commercial hybrids and to produce F2 progeny which are selected and selfed to produce new inbred lines. To maximize profits of a corn or animal breeding company, individuals which have the potential to make a significant contribution to a commercial breeding program must be quickly and accurately identified using resources as efficiently as possible. Design of the two phases of a commercial breeding program - crossing and evaluation - are determined by the reproductive biology of the species and, to a large extent, tradition. Current commercial animal and corn breeding programs differ in many regards including: use (avoidance) of inbreeding; public versus private genetic evaluations; application of mixed model methodology including utilization of relative information; use of molecular markers in selection; and design and size of testing programs. On the business side, corn and animal breeding programs currently differ in how proprietary germplasm is sold or licensed and protected. In the future, it is likely that current or new breeding techniques will be used in both commercial corn and animal breeding programs. The use of common techniques between both corn and animal breeding will be the result of scientific developments, e.g., new reproductive technologies and a move from selection at the whole organism (phenotypic) level toward selection at the DNA (genotypic) level, as well as potential business changes, e.g., mergers between breeding companies and acquisitions of agricultural breeding companies by large pharmaceutical or "Life Sciences" companies.

**Key Words:** Genetic Improvement, Selection, Corn Breeding