Chapter 12: The structure of breeding programs

Breeding programs aim at generating genetic improvement in a population. In breeding programs a permanent selection response is created for the breeding goal traits by collection of information on selection candidates, estimation of breeding values, selection among selection candidates in combination with a mating scheme for these candidates. Thus, the genetic improvement generated by the selection of animals in phase 5 in the breeding program is disseminated in phase 6: the structure of breeding programs.

**Definition**

A breeding program or a breeding scheme is a program aiming at defined breeding objectives for the production of a next generation of animals. It is the combination of recording selected traits, the estimation of breeding values, the selection of potential parents and a mating program for the selected parents including appropriate (artificial) reproduction methods.