Welfare in a broiler breeding market / program

Gosse Veninga, Koorstraat 2, 5831GH, Boxmeer, Netherlands
Gosse.Veninga@cobb-europe.com

Breeding goals in broiler breeding programs have changed over time from being production driven to market demand driven. In the market place there is nowadays an expanding discussion about welfare friendly produced meat but the growth in this segment depends on the fact if consumers are willing to pay for meat with a higher welfare standard. Unless the fact that consumers are often not willing to pay more for meat produced under higher welfare standards there has been clearly more attention for balanced breeding. One hand because of the producers of poultry meat want to be able to manage the birds in a relative easy way, on the other hand because of an increasing pressure from the society.

Tremendous improvements have been made for Body Weight (BW), Feed Conversion Ratio (FCR) and Breast Meat% (BM%). For a straight run broiler at 42 days the genetic progress in BM% was about 10% and a similar increase was realized for the correlated trait Carcass Yield (CY). In the same period BW increased almost 1 kg while FCR went down from about 2.40 to 1.80. Because of the heavy selection for these broiler traits more and more attention has been put on traits related to leg strength, metabolic diseases and other welfare traits.

Breeding companies approach the topic from different angles in order to improve the welfare standards of the modern broiler. The farming environments over the world are clearly different. Because of that products are in one area market leader and in another area number 2 or 3. It would be good to consider these environments in order to avoid potential imbalances in the product. Genomic selection can help in this area. The implementation of Genomic Selection is at an early stage in broiler breeding since the advantages are not as big as for dairy cattle or layers but there are still many ways to explore the potential use. Development of special welfare products is another option to fulfill the demand and because of that breeding companies are keeping a large gene pool.

In a broiler breeding program every bird is checked for defects, and specifically for leg defects. Data collection includes leg defects like Valgus, Varus, Foot Path Dermatitis, Hock Burn, Crooked Toes, TD and Femroal Head Necrosis. Several of these traits have been improved substantially over the last decade. Because of a continuous selection pressure on broiler traits like BW, FCR and BM% the selection for leg strength will continue as well in order to maintain the balance. As a result of these selection efforts liveability of broilers have improved over the years.

Other traits of interest are ascites and sudden death. By measuring these 2 traits under challenging circumstances a significant genetic improvement can be made. A broiler breeding program will keep focus on a balanced product for the future market. How much emphasis will be put on welfare traits also will depend on the demand.