Abstract

Meat-type chickens have been intensively selected for over 60 years. Modern broiler strains reach 1500 g body weight in 28 days, compared to 120 days needed in 1925. Improvement in body weight of the genotypes which have been used for broiler production in last 60 years is about 360% and 87%, the feed conversion ratio decreased from 2.1 to 1.6 and 84% of this is because of the development in genetics. The progress of hatching eggs (175 eggs), hatching egg weight (64.2 g) and hatchability (84.8%) has been observed. Selection of meat-type chicken has primarily focused on growth rate and improving body composition. One of the first challenges as a result of selection for quick growth, is that of increased carcass fat deposition. Increased body size and muscularity of broiler breeder males may impair the ability to successfully transfer sperm and complete matings. This problem was followed by an increase in incidence of physiological leg problems. Additional problems have surfaced regarding immune function, skeletal disorders, livability, and in the breeder level reproductive troubles. The negative correlation between reproductive and growth features limits the advancement to be achieved of development.

Keywords: Broiler, Breeding, Performance, Developments, Challenges