**Development of Strains Allowing to Gender Discrimination by Feathering Rates from Pure Lines at Poultry Research Institute**

This study was carried out on one male (Rhode Island Red-1) and two female lines (Line-54 ve Barred Rock-1) of Brown layers developed at Poultry Research Station of Ankara. In commercial progeny of these lines, sex identification can be done according to plumage color. The aim of the project was to realize auto-sex on the basis of parent line by developing rapid and slow feathering traits in these one male and two female lines.

It was planned to obtain rapid and slow feathering lines of male and female lines respectively from RIR-H, RIR-Y, BAR-H, BAR-Y, L54-H and L54-Y coded genotypes. At the hatching time, wing feathering rate was controlled at day old chicks and those which showed desirable feathering rate with respect to the characteristic of lines were selected as breeders. These chicks were also examined for tail feathering rate at ten days of age and those which did not show this trait accordance with the wing feathering rate at one day of age were discarded. In 2013, mating these lines the realization percentage of sex identification on the basis of parent lines was examined and achieved 94 percent accurately. By further test studies it is possible to improve this success rate decreasing such variation.