Abstract by John McCarthy - Estimation of Genetic Parameters for Irish Milk Production Traits using Random Regression.

Genetic Parameters were estimated for test day milk yield, fat yield, protein yield and ln(scc) for x Holstein Friesian cows with x,y,z,a,b records in parities 1,2,3,4 and 5 respectively.Parity 1,2,3 were treated as seperate traits and parities 4,5 were treated as repeated records of parity 3. A random regression animal model with fitted using mix99 software. A fixed laction curve was fitted using linear, quadratic and wilmink polynomial terms within calving season * parity. Similarly linear,quadratic and wilmink polynomials was used to fit random animal, permanent envionment and herd effect. Heritability ranged between 0.12 to 0.27 for milk yield, between 0.10 and 0.21 for protein yield, between 0.11 and 0.20 for fat yield and between 0.10 and 0.26 for ln(scc).