

A CANDIDATE REGION APPROACH ALLOWS EFFICIENT QTL DETECTION IN UK SUFFOLK AND TEXEL POPULATIONS. G.A. Walling^{*}, A.D. Wilson, B.L. McTeir, P.M. Visscher, G.Simm & S.C. Bishop. Roslin Institute, Roslin, Midlothian, EH25 9PS, UK. Large half-sib families in the UK Suffolk and Texel sheep sire reference schemes were utilised to test for the segregation of QTL for growth, muscularity and fatness traits. Regions of the genome under investigation were selected based on previous studies. Regions on chromosomes 1, 2, 3, 4, 18 and 20 produced nominal significance ($P < 0.01$) for the presence of QTL(s). Evidence in more than one family was available for chromosomes 2, 18 and 20. The fatness effects on chromosome 2 corresponded to a location near the myostatin gene, the muscularity effects on chromosome 18 were very similar to the Carwell allele for the rib eye muscling locus, with the location close to both Carwell and Callipyge, and fatness effects on chromosome 20 were located around the MHC region, similar to results in other species. The candidate region approach shows the generic applicability of results across breeds.