

**Figure S3** Proportion of detected QTL with zero, one, or multiple causative genes in the 1.5 LOD support interval. As seen in the equal effect simulations, a high number of gamma distributed causative genes leads to detected QTL with multiple causative factors. There is a relatively high percentage of detected QTL in the simulations containing a single causative gene when few (less than 4) causative genes are simulated, but as the number of simulated causative genes increases we quickly lose the power to distinguish between closely linked causative genes and they become lumped into single detected QTL.