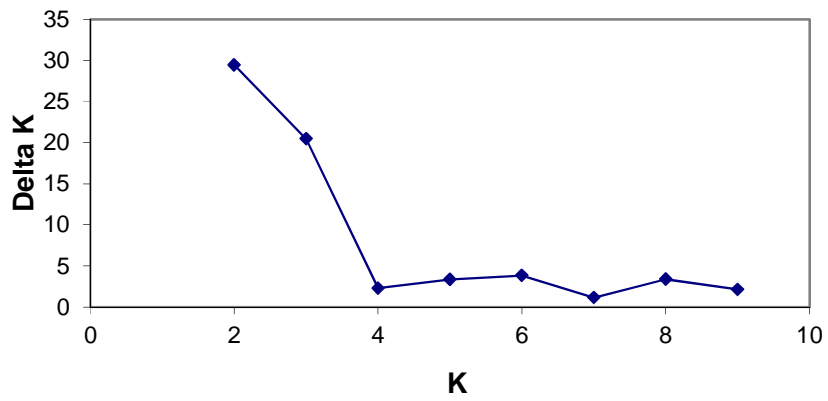
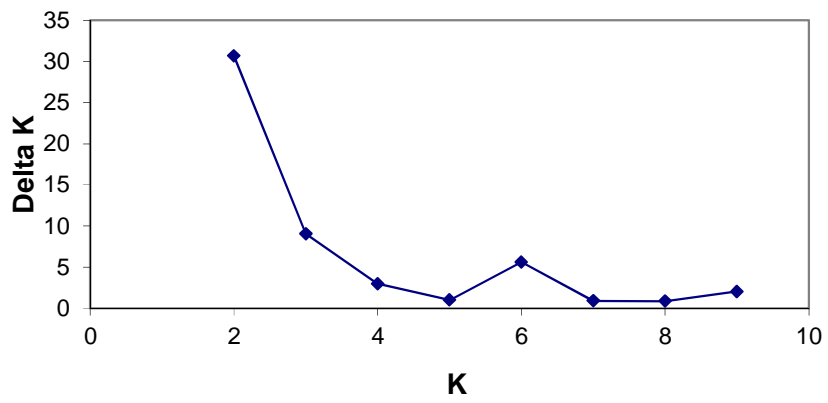


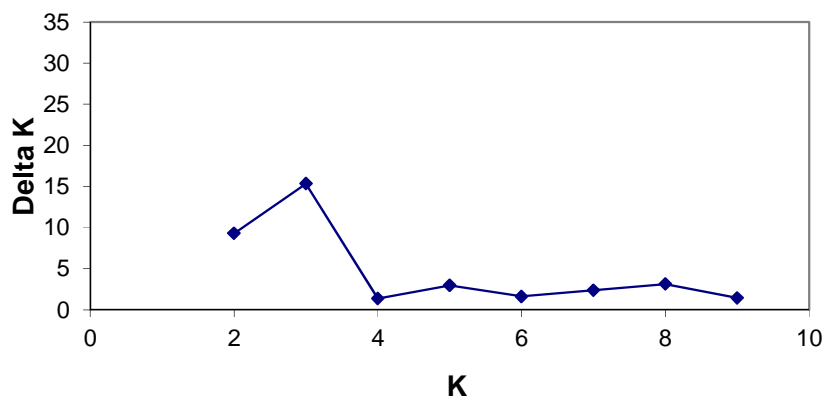
### MLB



### ESM



### AR



#### Relation between Delta K and the number of clusters K for each breed

Delta K =  $\frac{\text{mean} [|L(K+1)-2L(K)+L(K-1)|]}{\text{standard deviation}[L(K)]}$  where  $L(K)$  is the log probability of data.