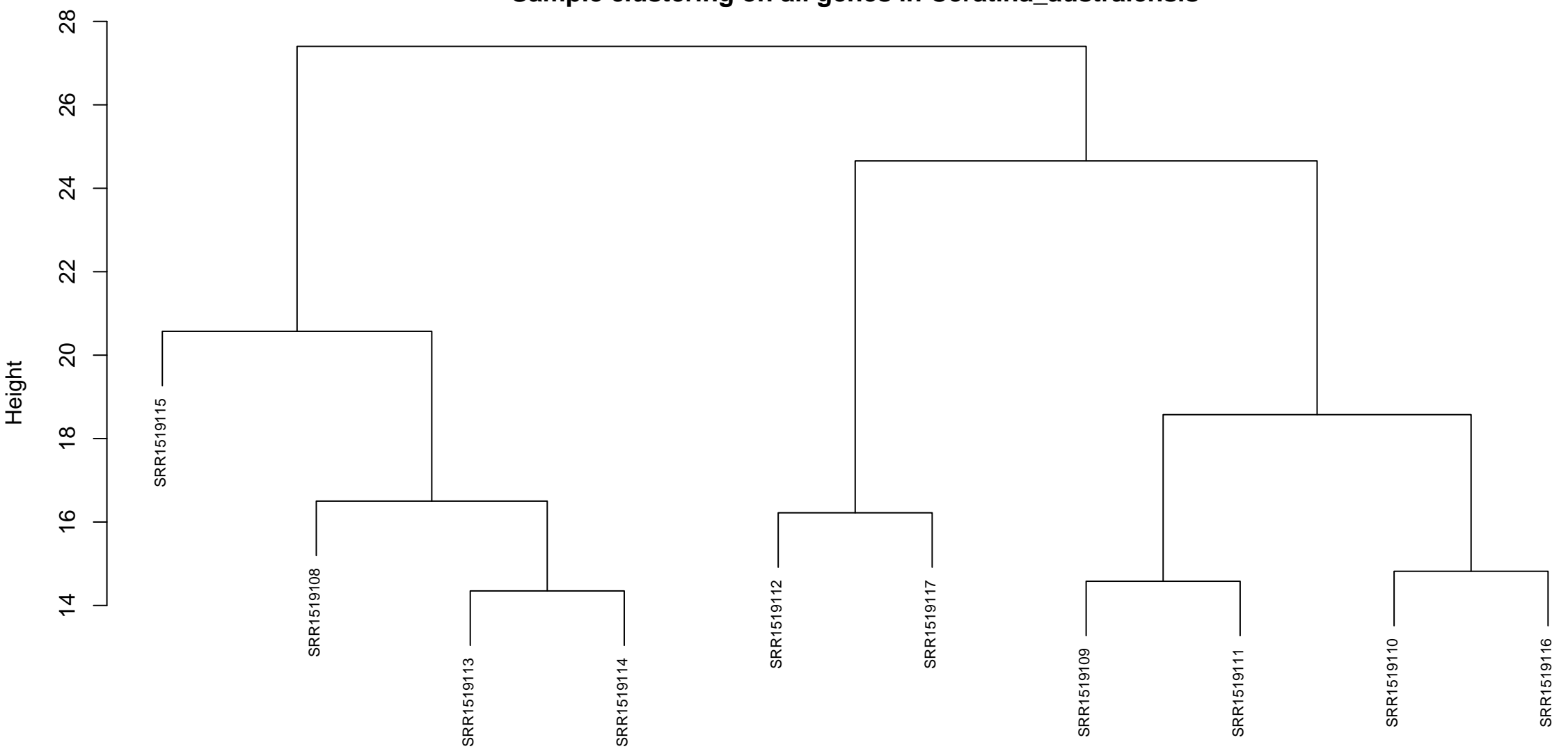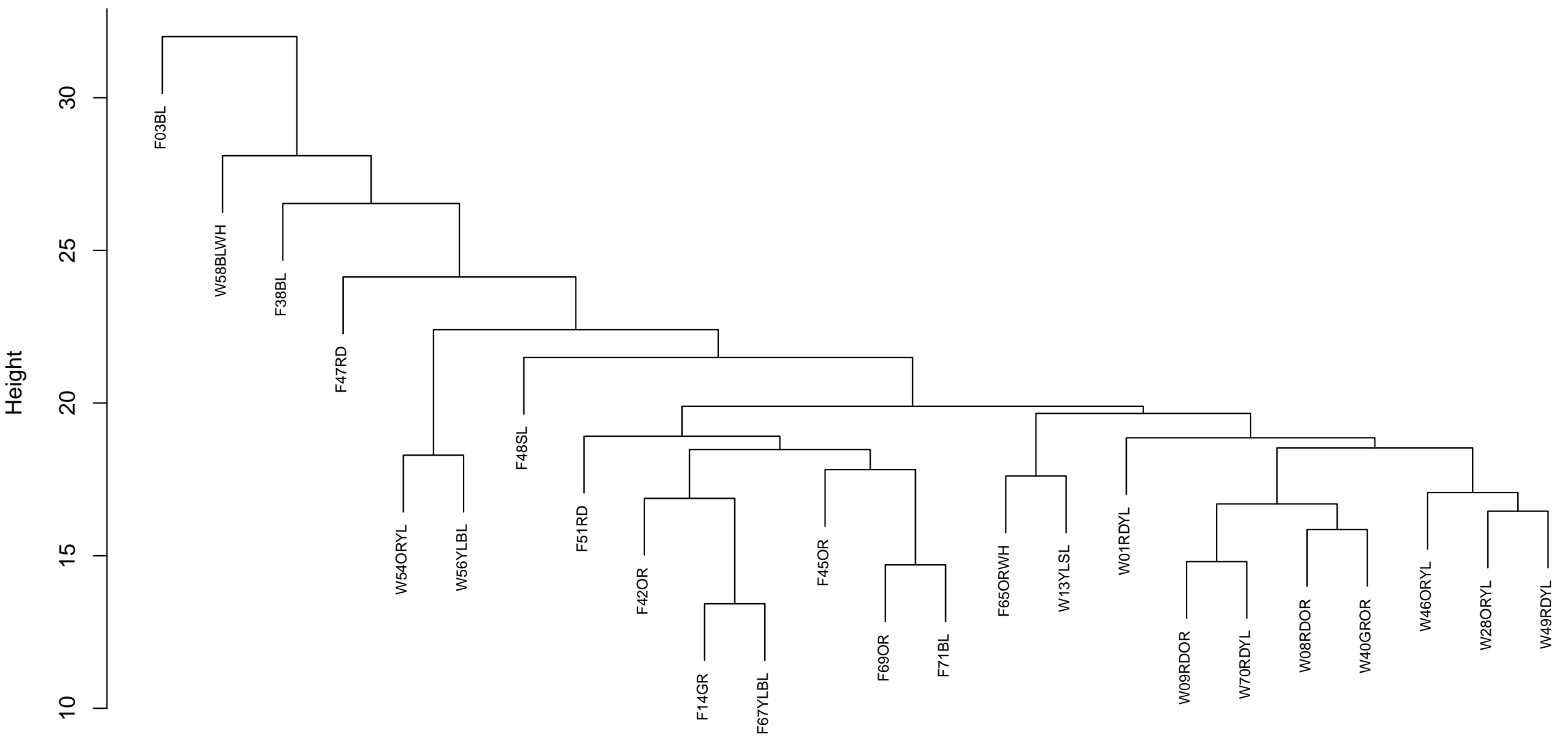**Sample clustering on all genes in Ceratina_australensis**

**Sample clustering on all genes in Ceratina_calcarata**

**Sample clustering on all genes in Megalopta_genalis**