

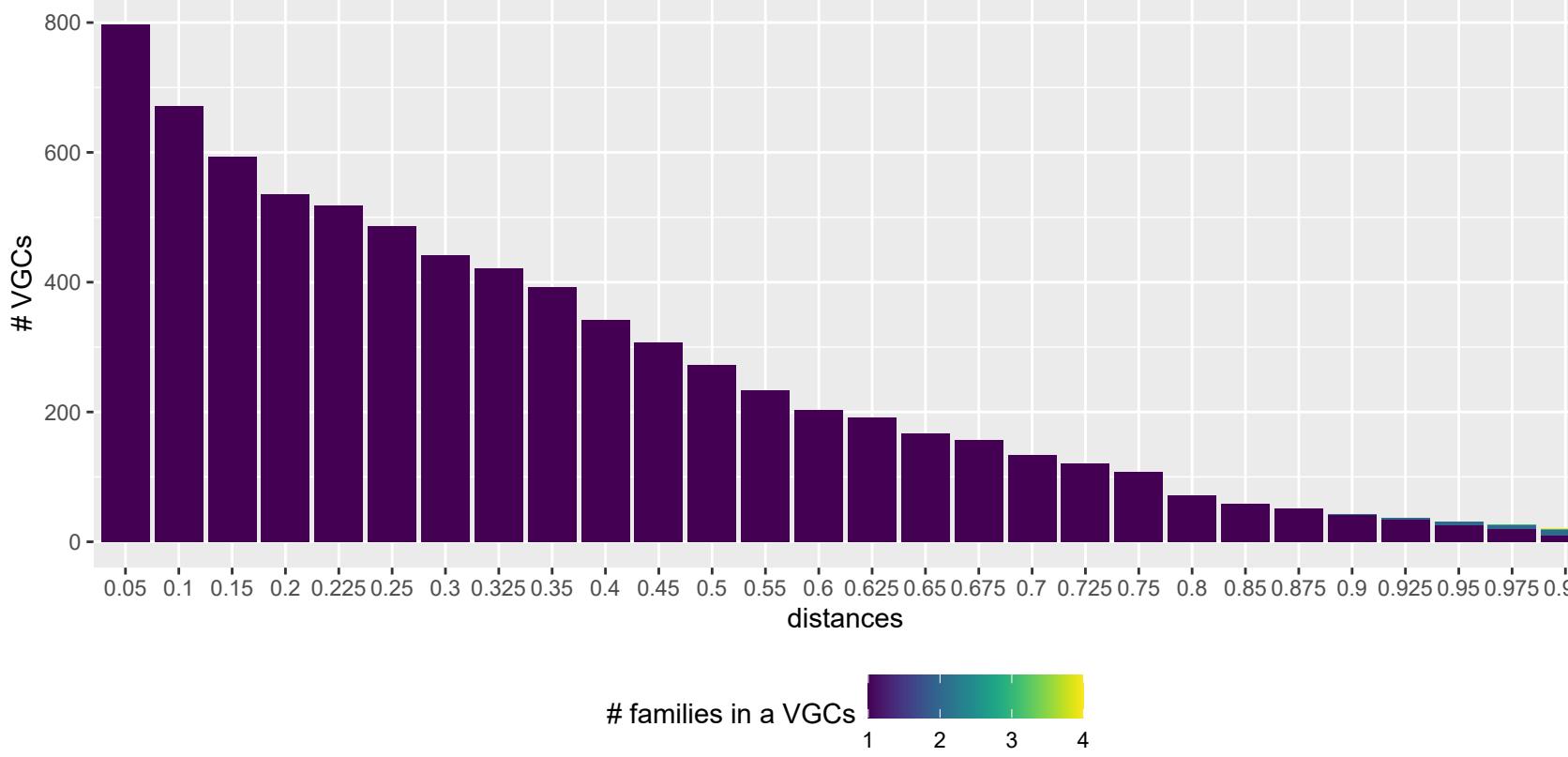
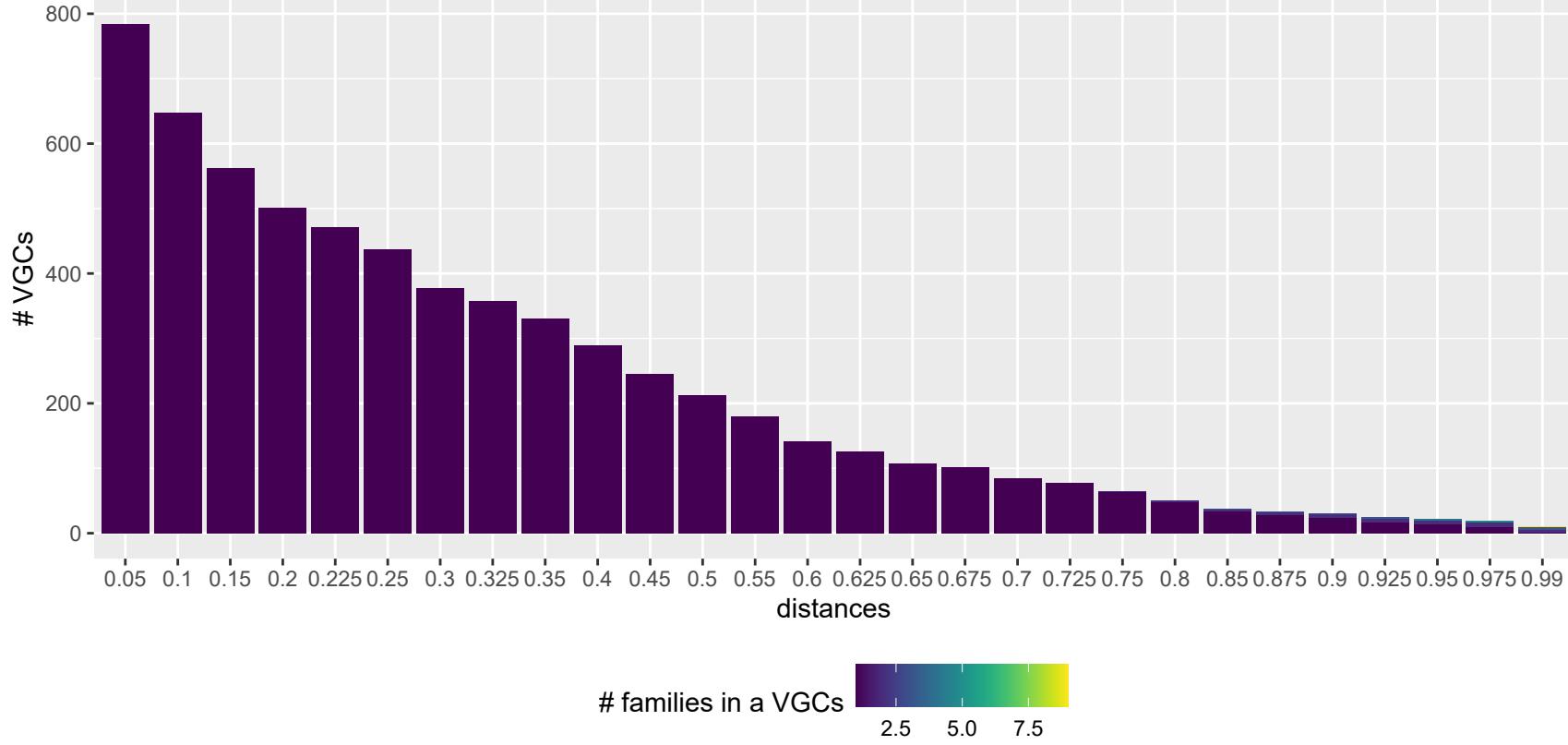
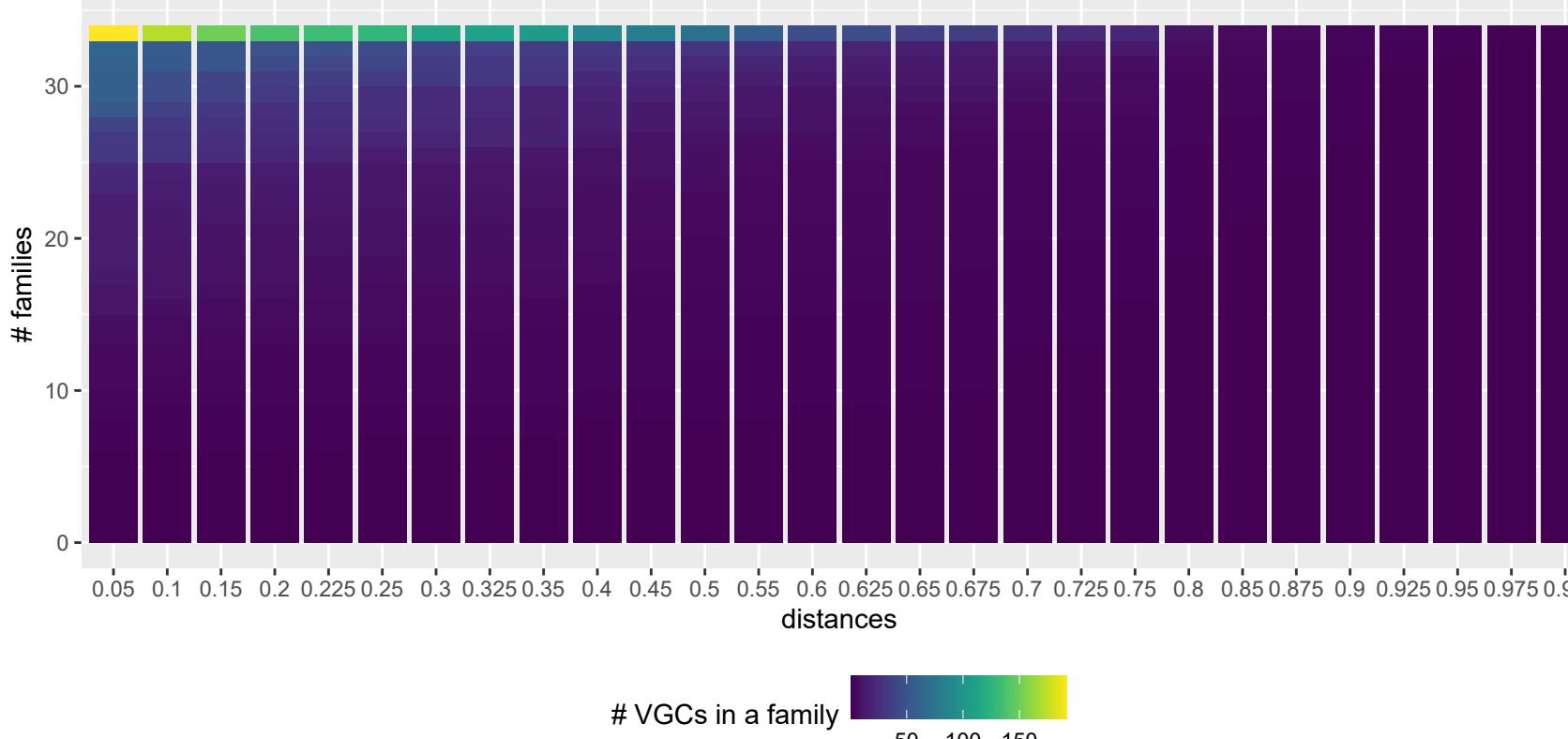
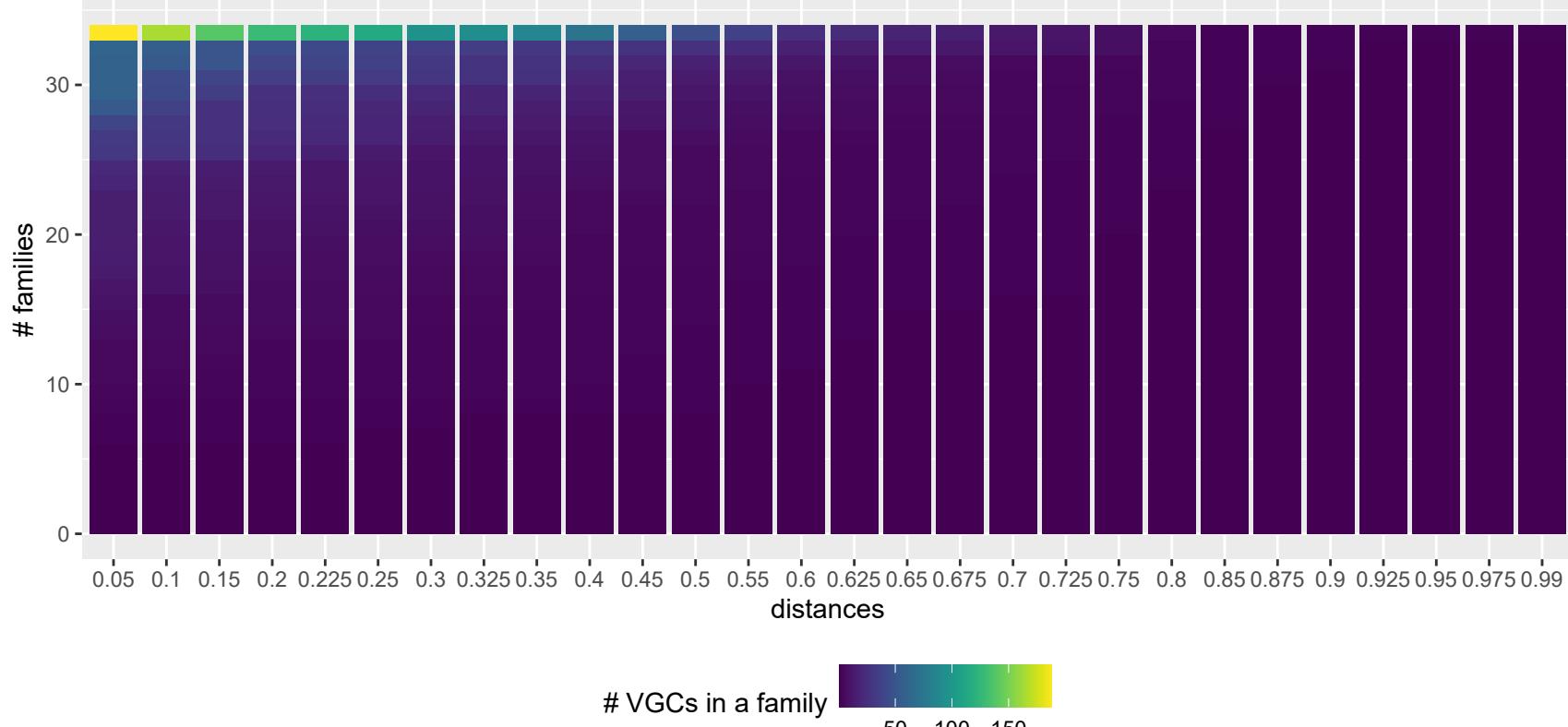
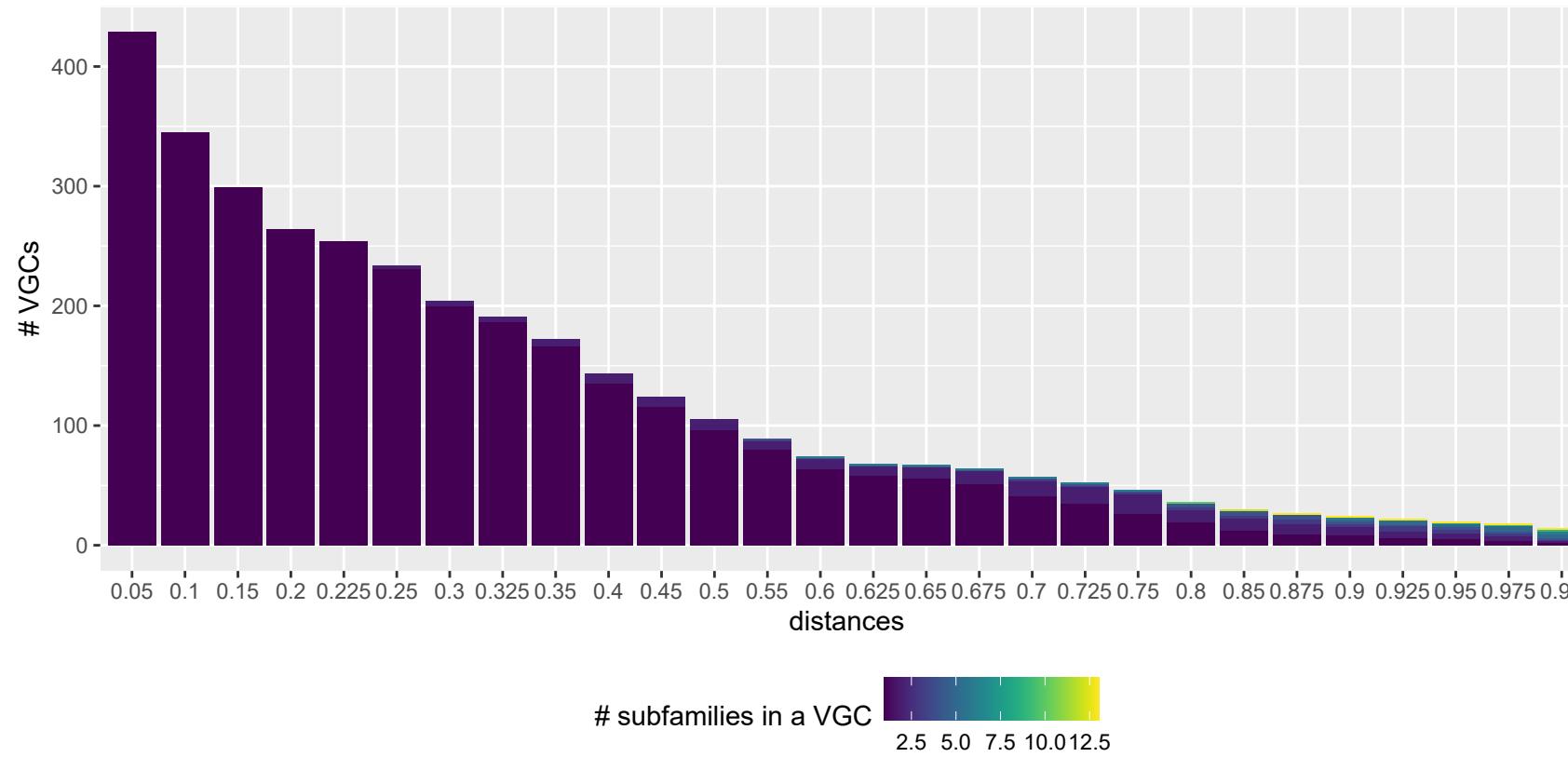
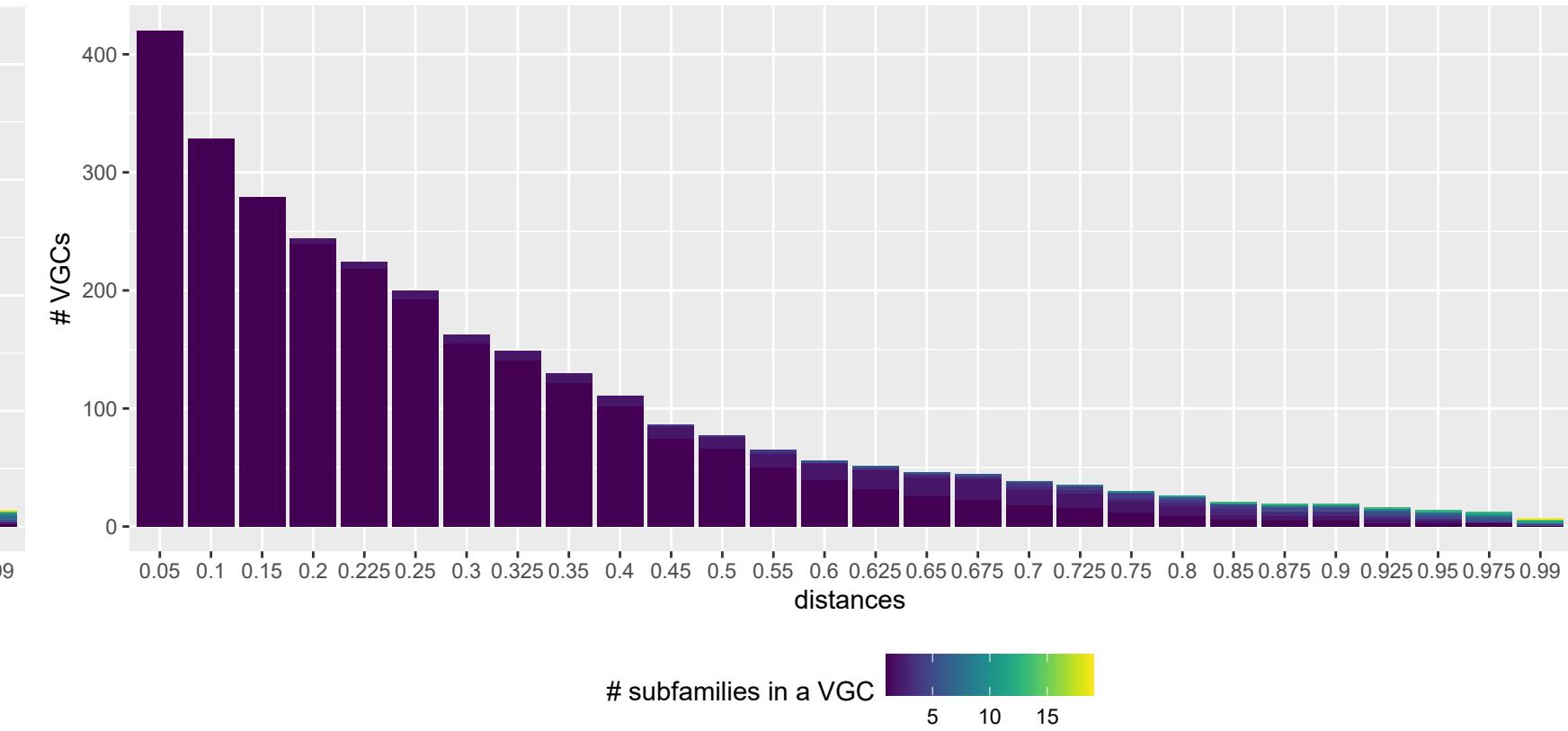
A PCs - VGCs with different number of families**C PSCs - VGCs with different number of families****B PCs - Families with different number of VGCs****D PSCs - Families with different number of VGCs**

Fig. S1: Relationship between the number of VGCs and families for *Duplodnaviria*, when the PC- and PSC-based genomic trees of the Fam_DB dataset were cut with different intergenic distances.

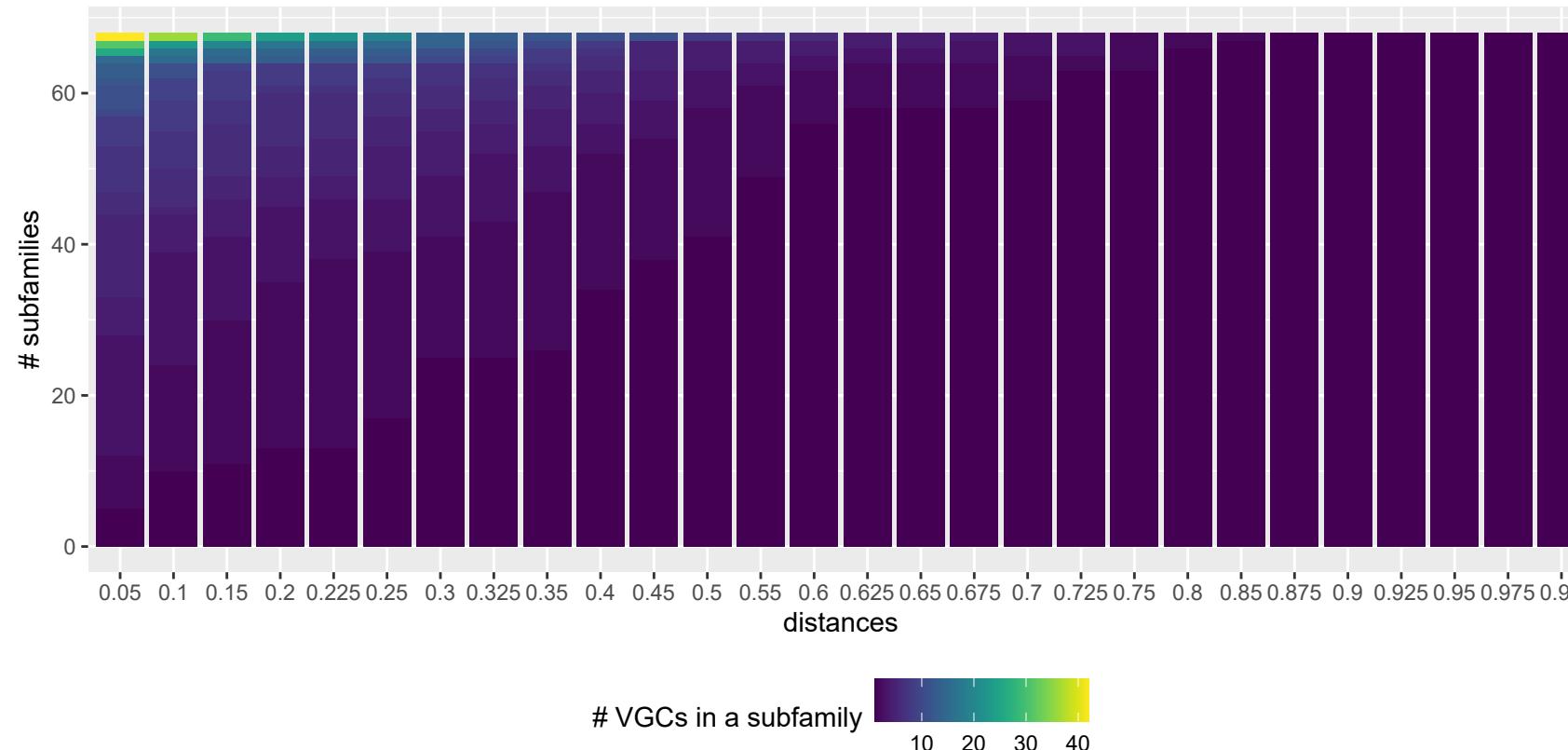
A PCs - VGCs with different number of subfamilies



C PSCs - VGCs with different number of subfamilies



B PCs - subfamilies with different number of VGCs



D PSCs - subfamilies with different number of VGCs

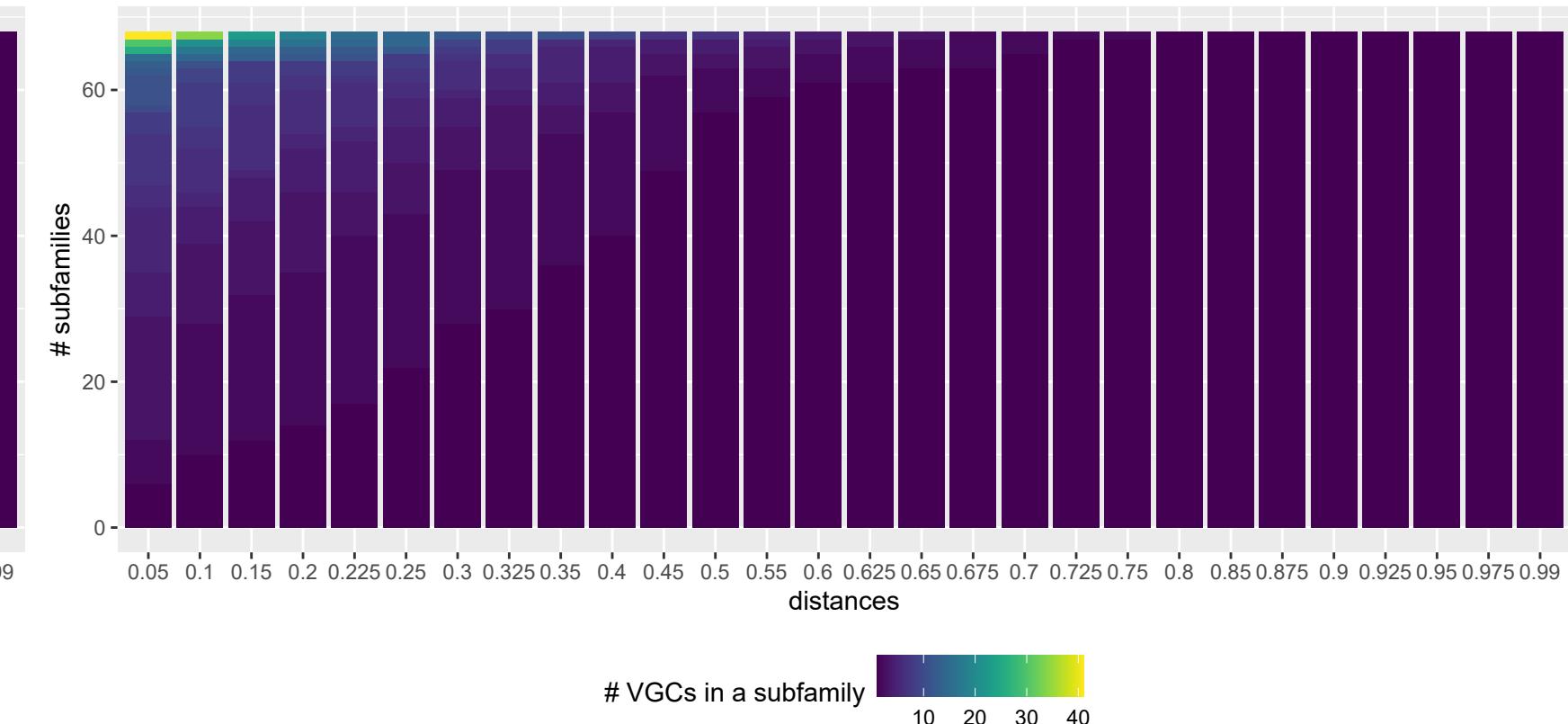


Fig. S2: Relationship between the number of VGCs and subfamilies for *Duplodnaviria*, when the PC- and PSC-based genomic trees of the Fam_DB dataset were cut with different intergenomic distances.

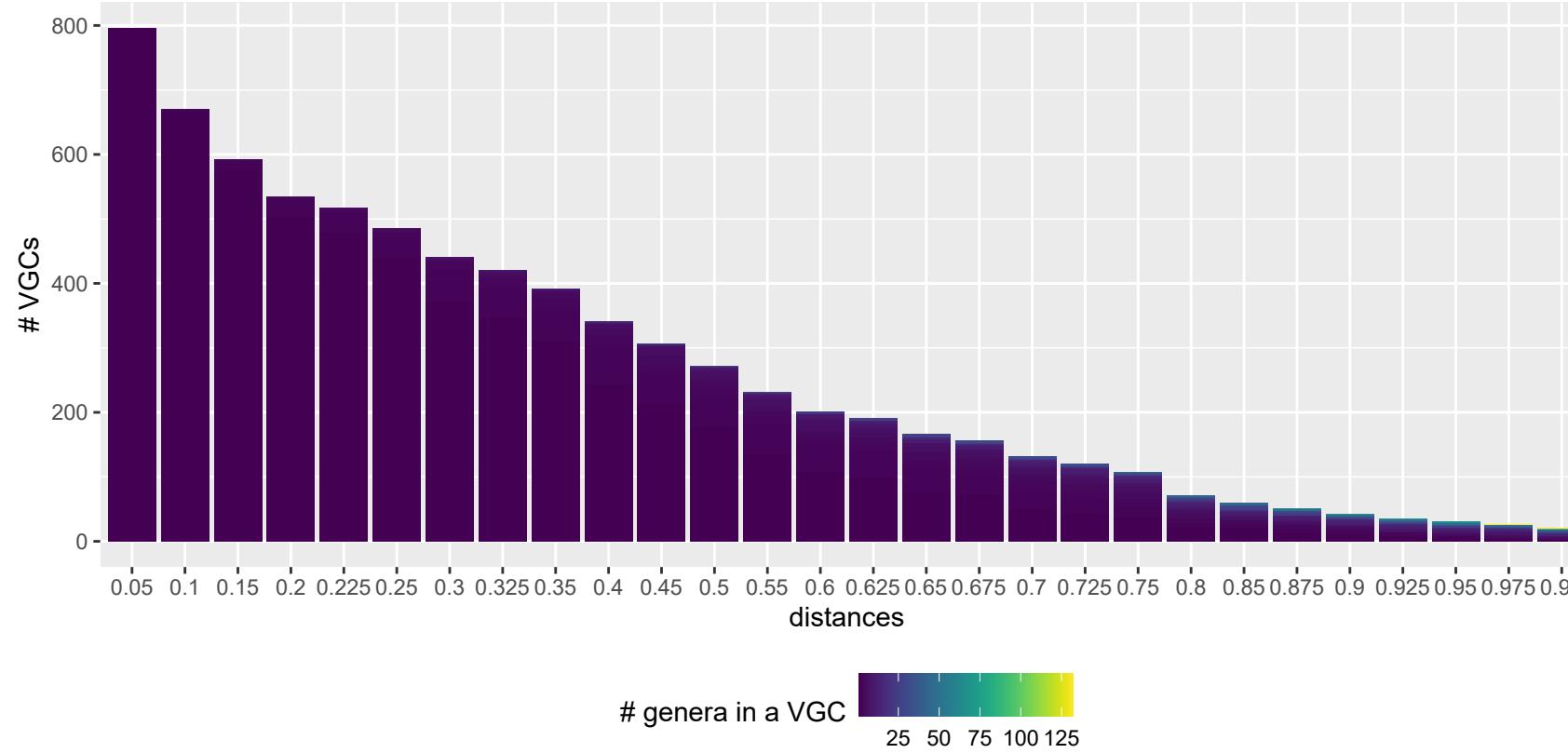
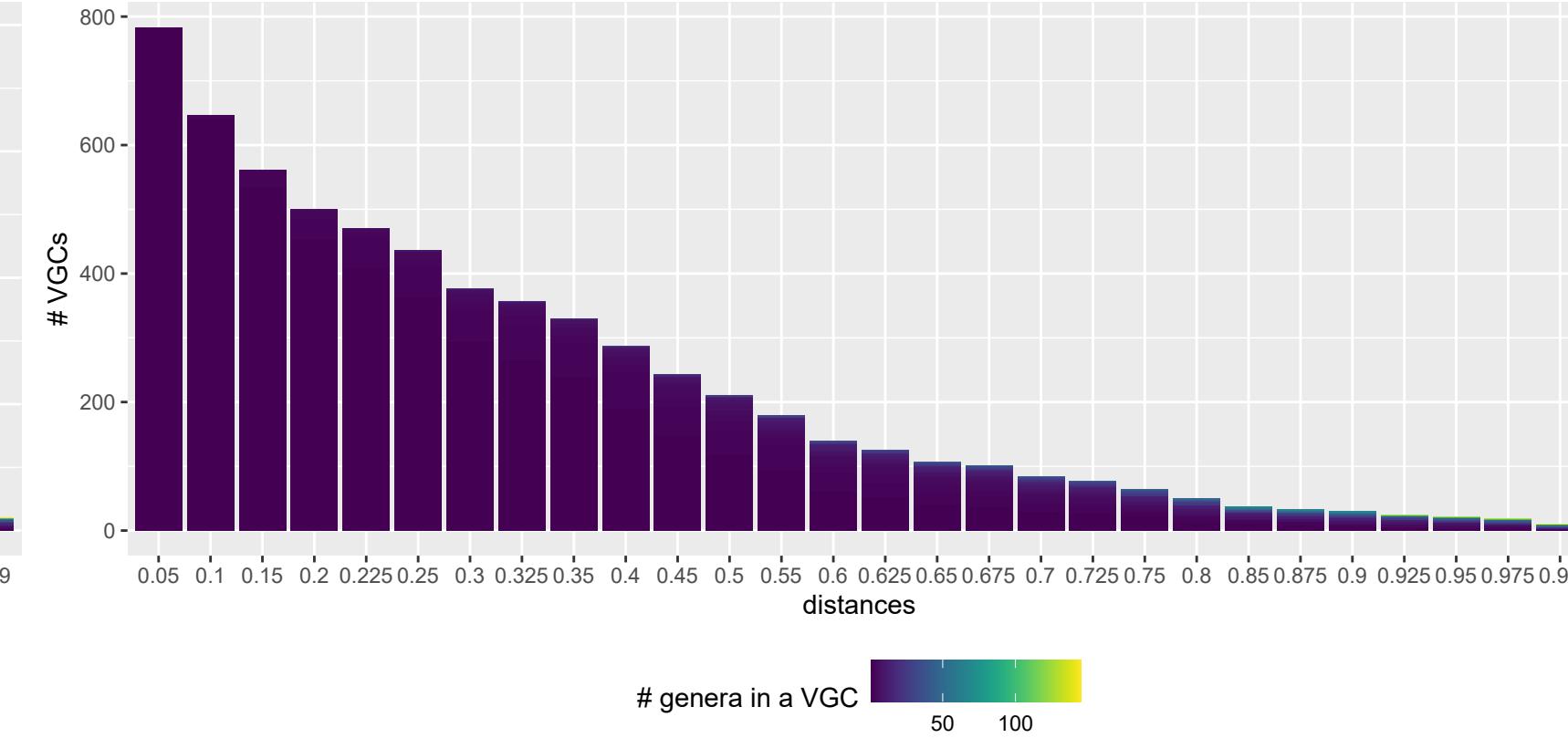
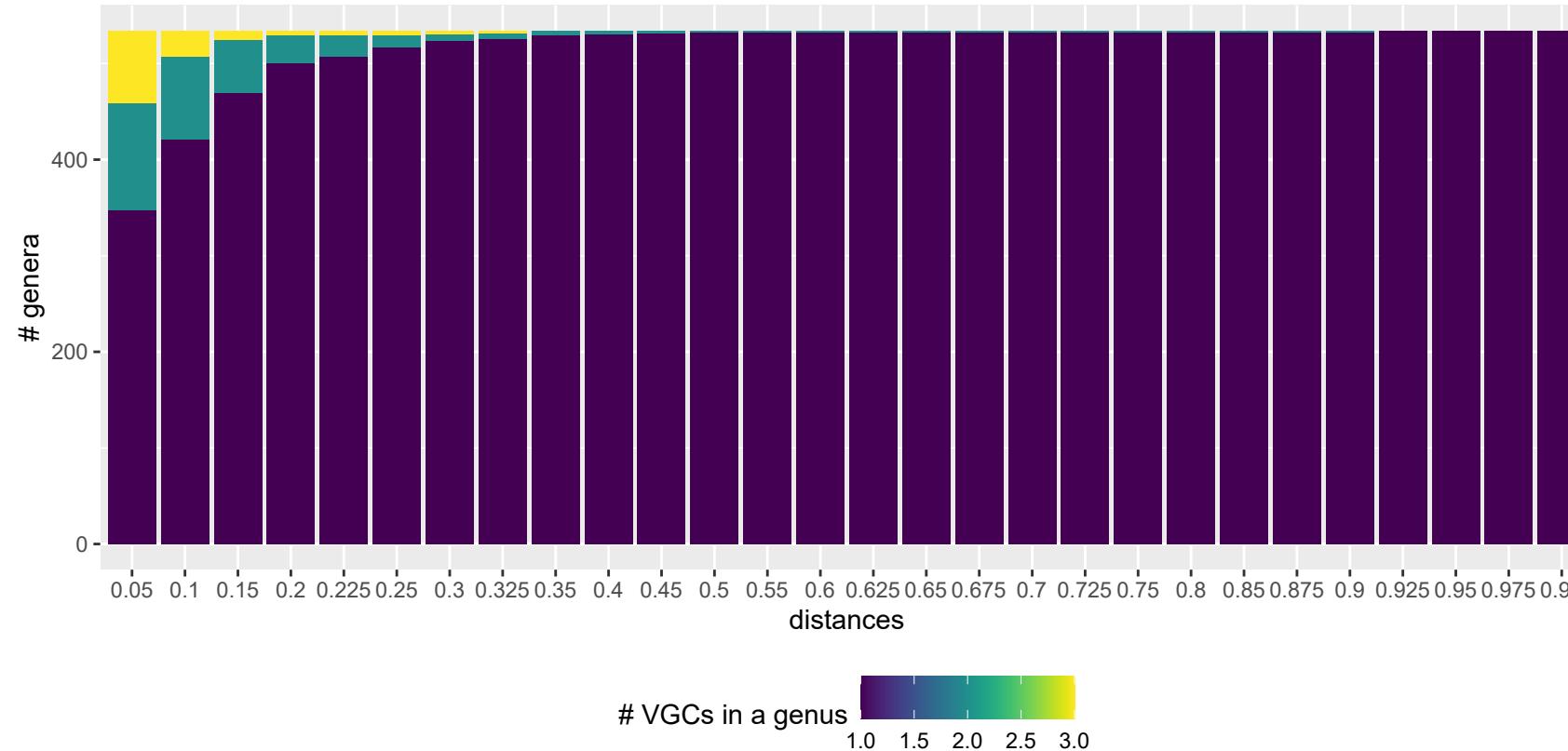
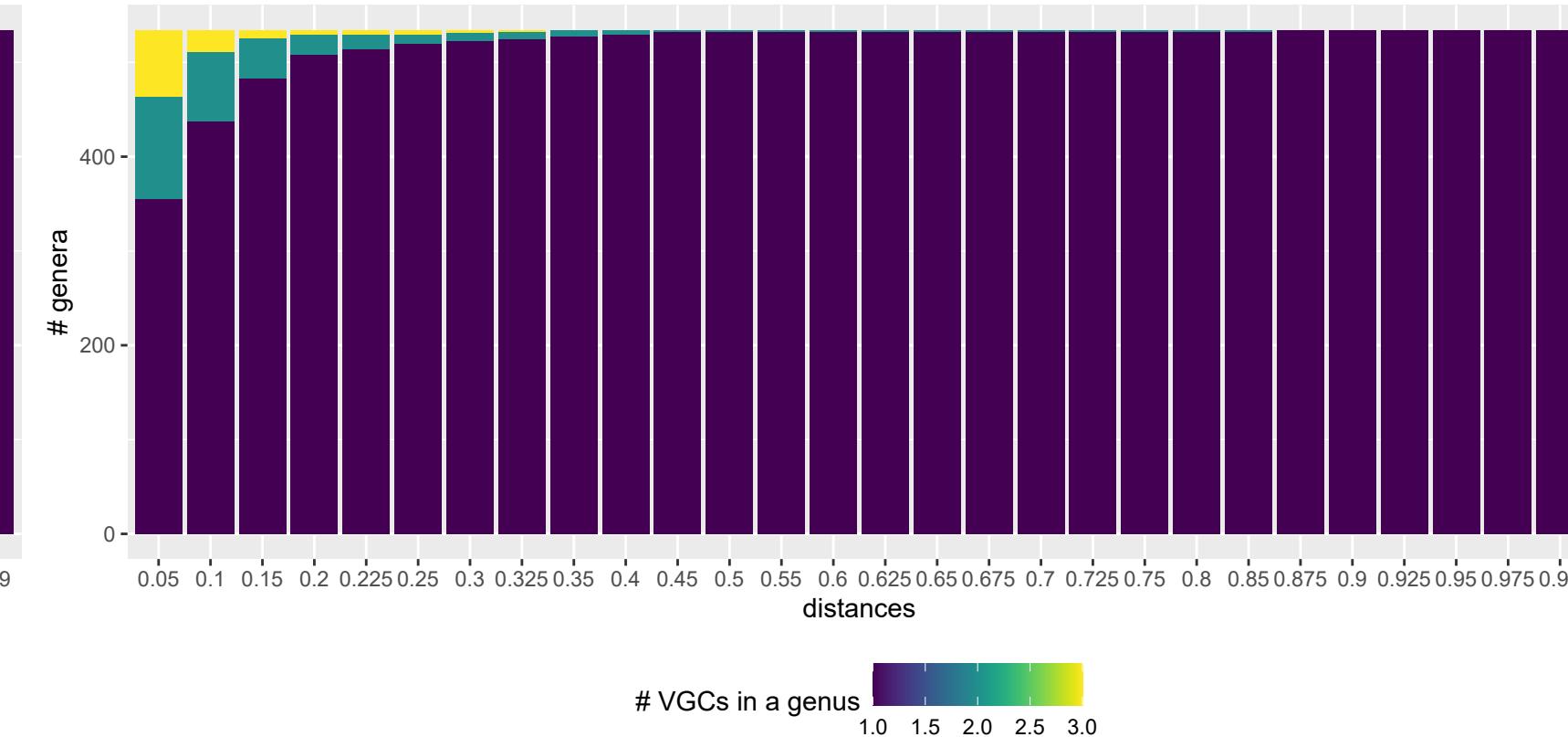
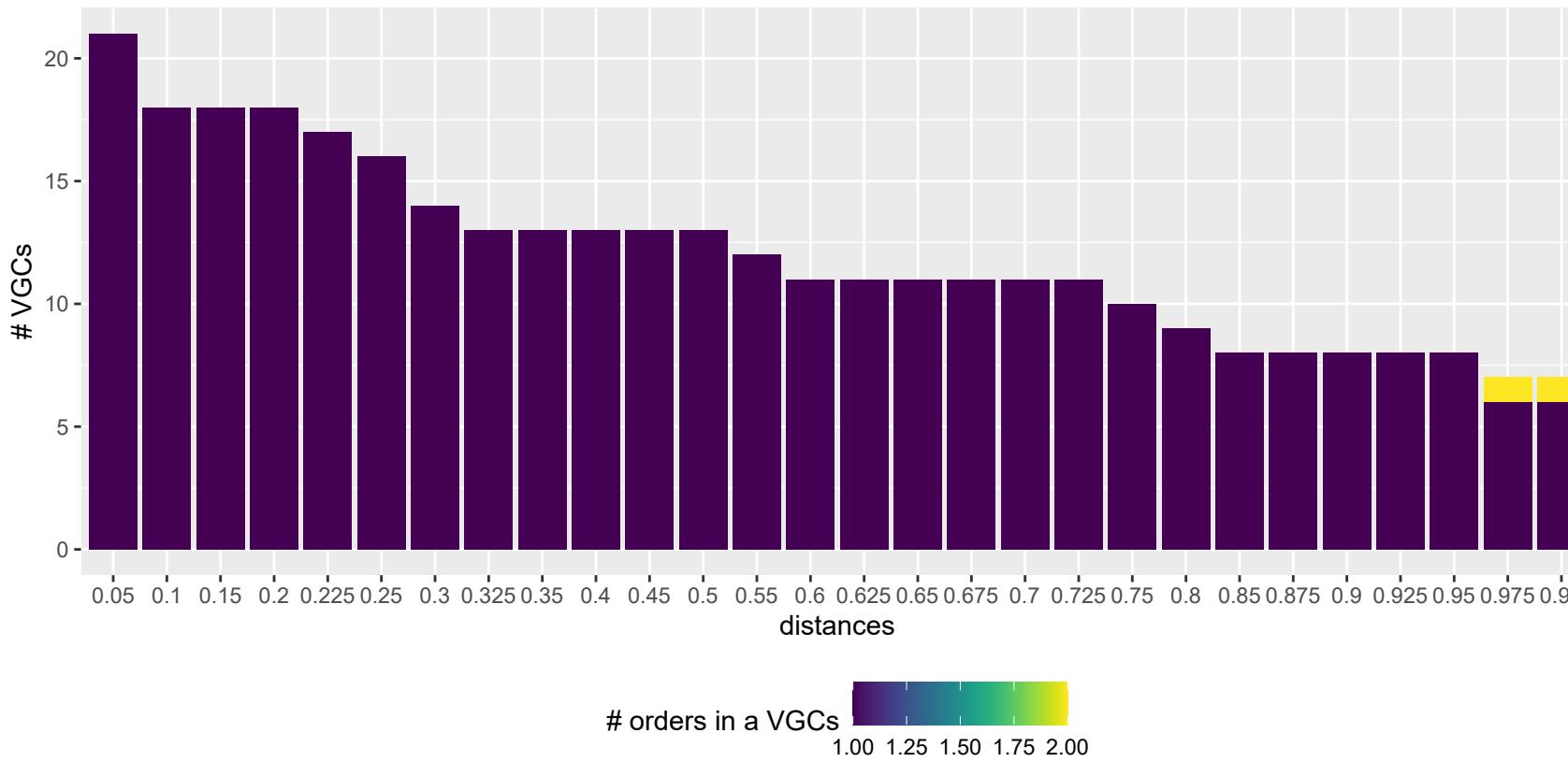
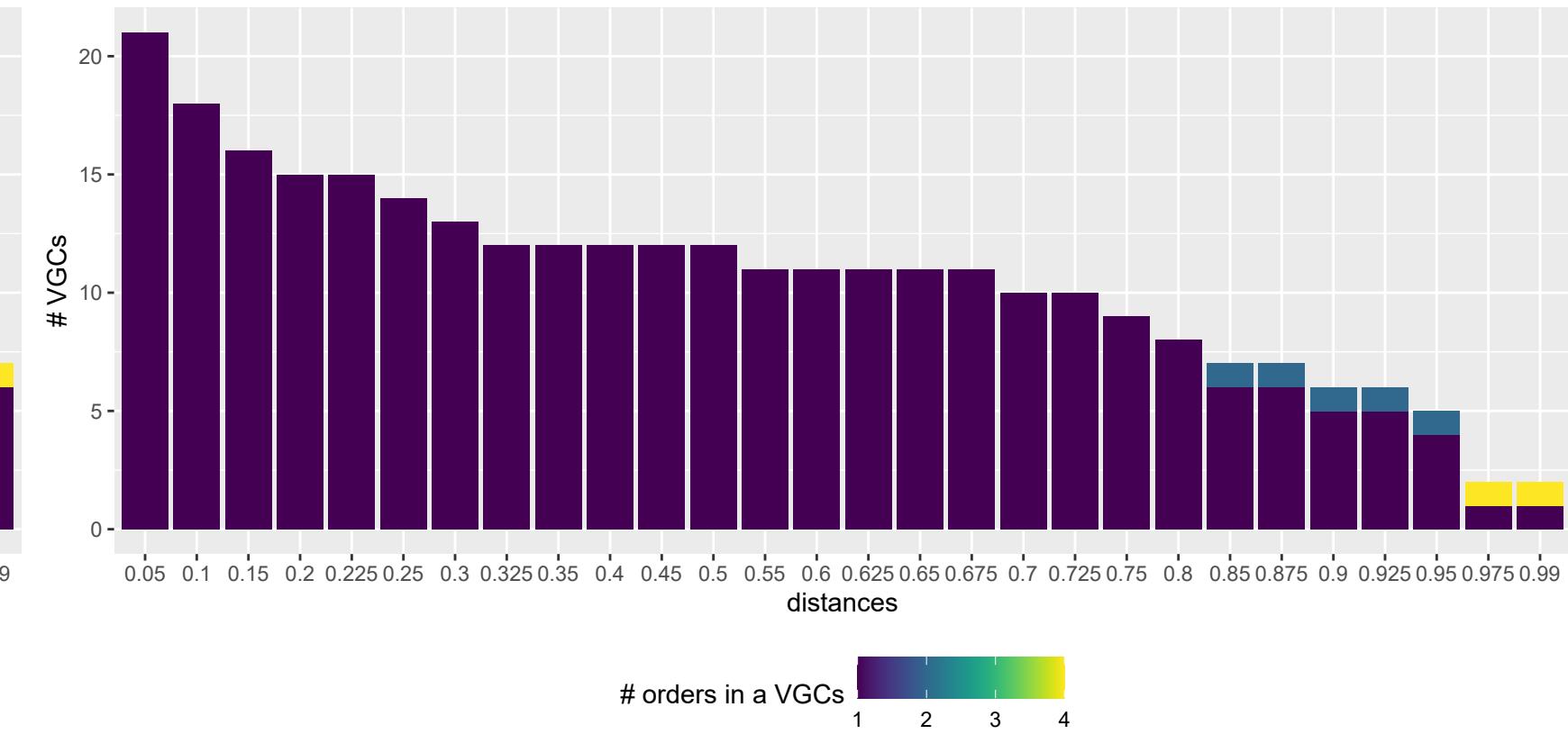
A PCs - VGCs with different number of genera**C PSCs - VGCs with different number of genera****B PCs - genera with different number of VGCs****D PSCs - genera with different number of VGCs**

Fig. S3: Relationship between the number of VGCs and genera for *Duplodnaviria*, when the PC- and PSC-based genomic trees of the Fam_DB dataset were cut with different intergenomic distances.

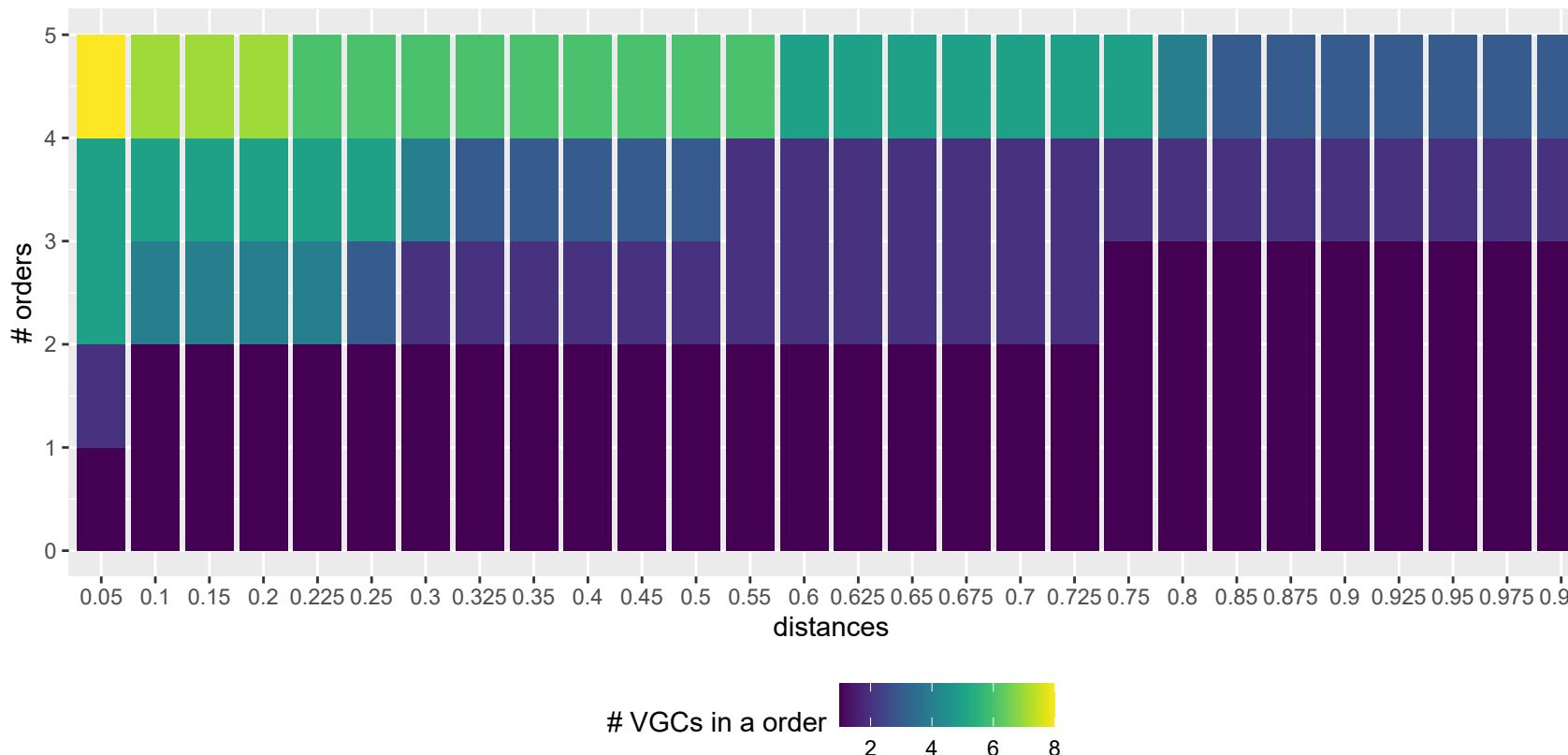
A PCs - VGCs with different number of orders



C PSCs - VGCs with different number of orders



B PCs - orders with different number of VGCs



D PSCs - orders with different number of VGCs

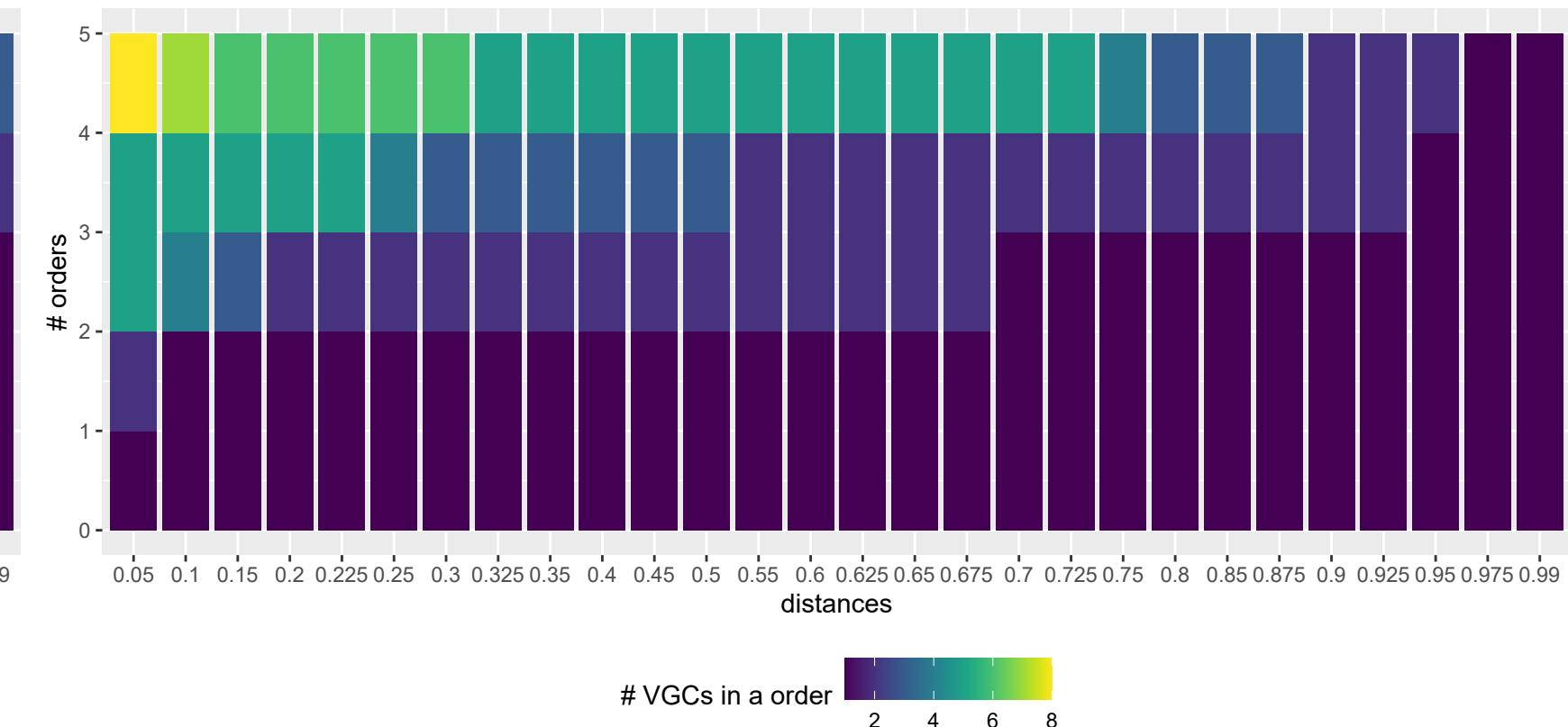
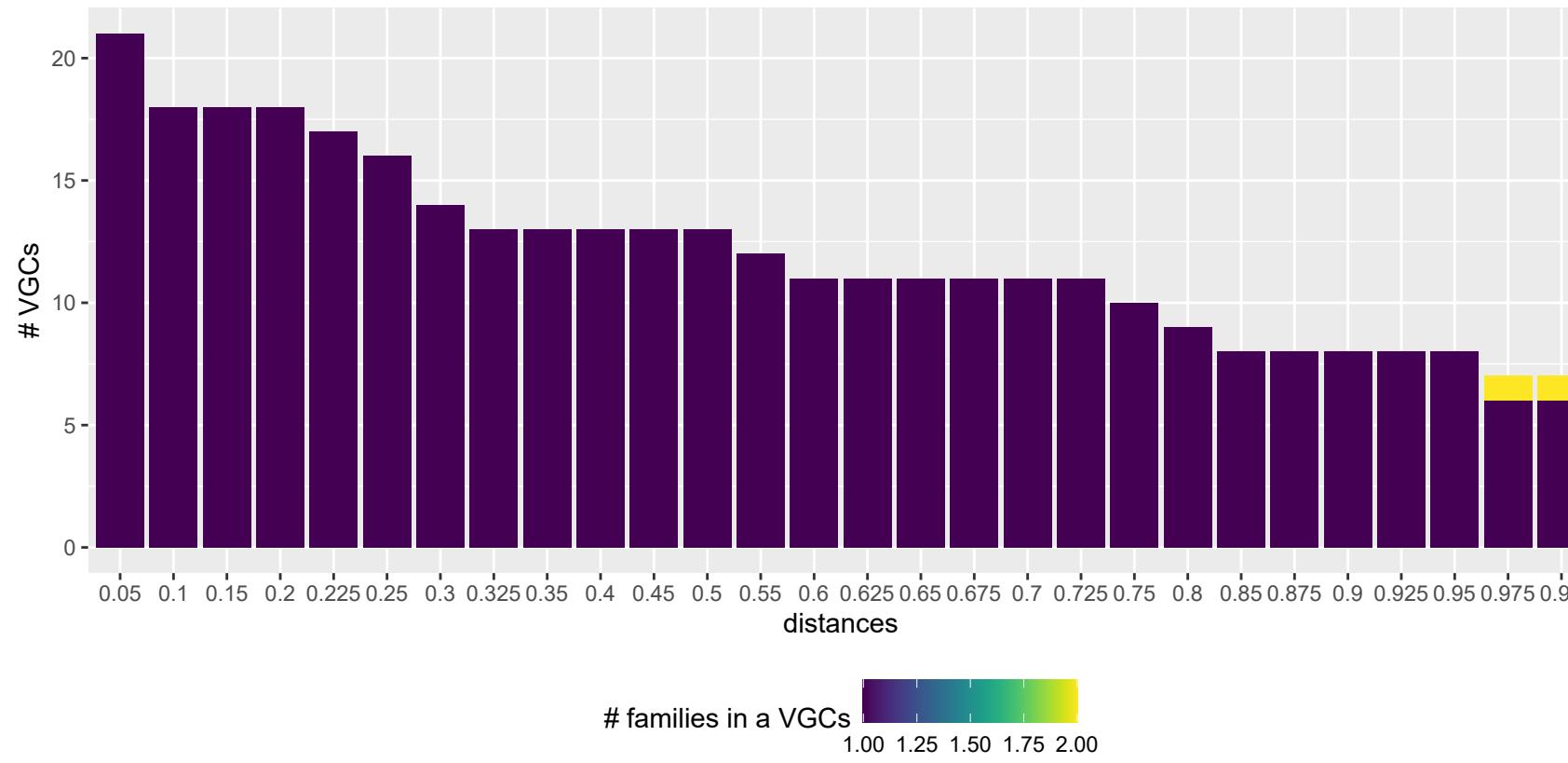
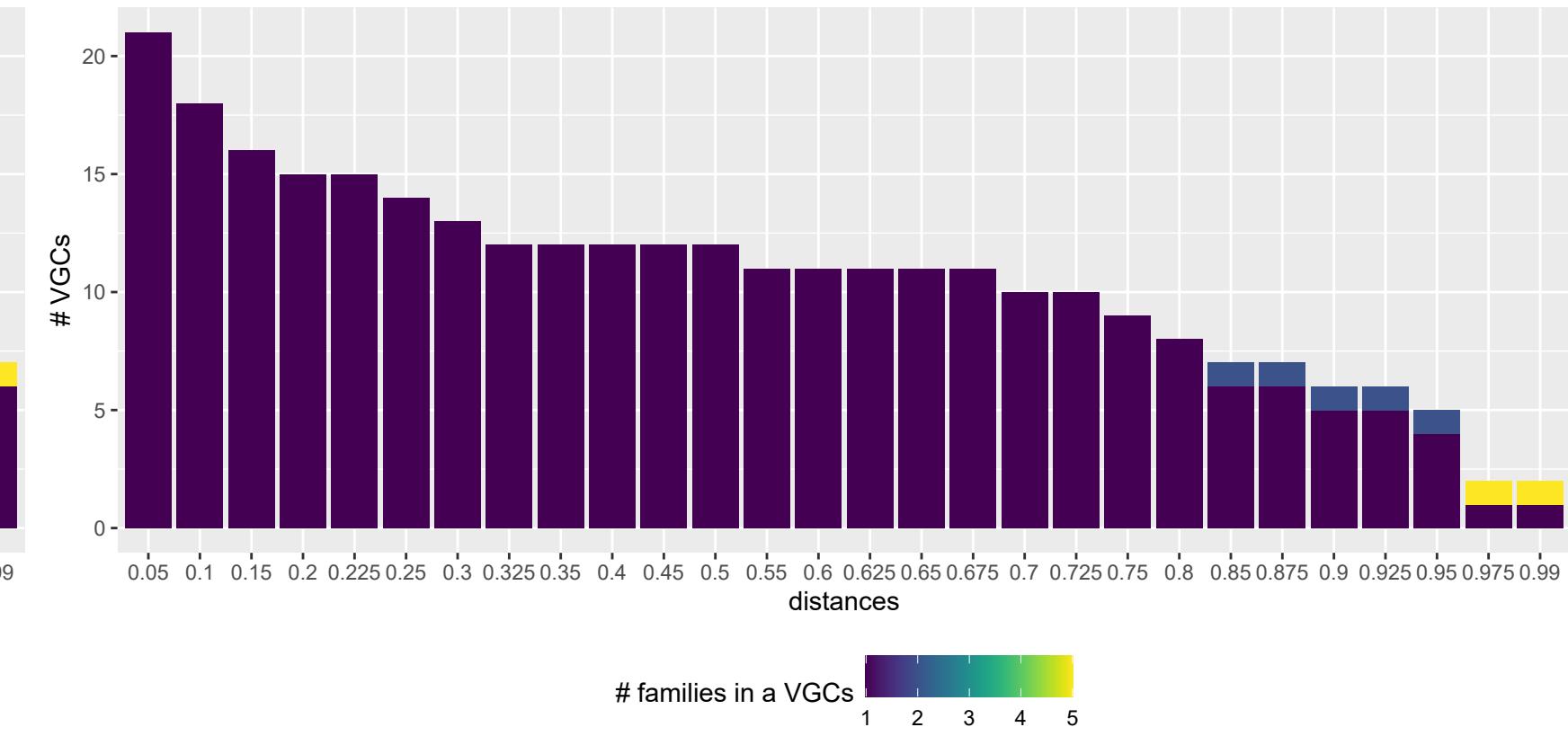


Fig. S4: Relationship between the number of VGCs and orders for *Varidnaviria*, when the PC- and PSC-based genomic trees of the Fam_DB dataset were cut with different intergenomic distances.

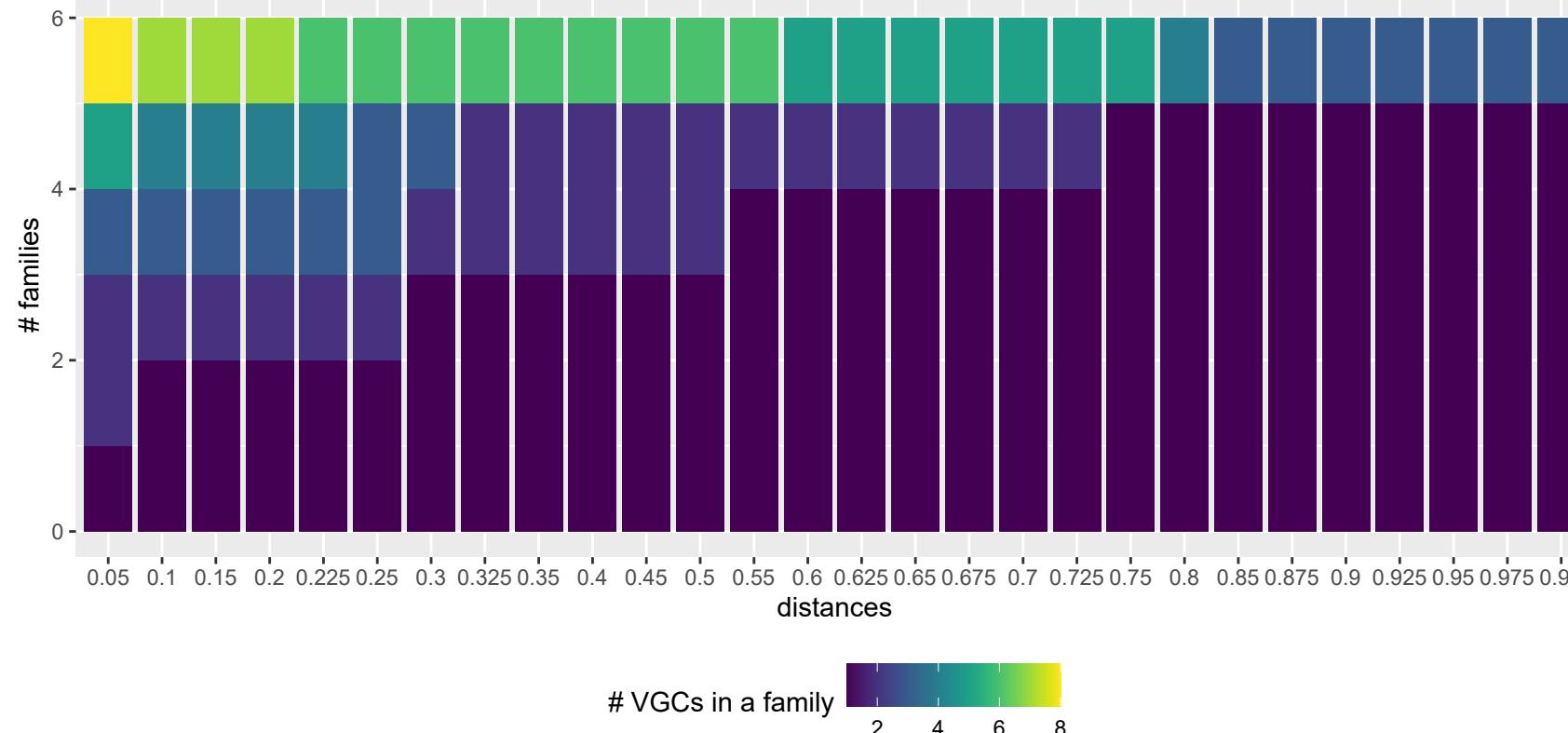
A PCs - VGCs with different number of families



C PSCs - VGCs with different number of families



B PCs - Families with different number of VGCs



D PSCs - Families with different number of VGCs

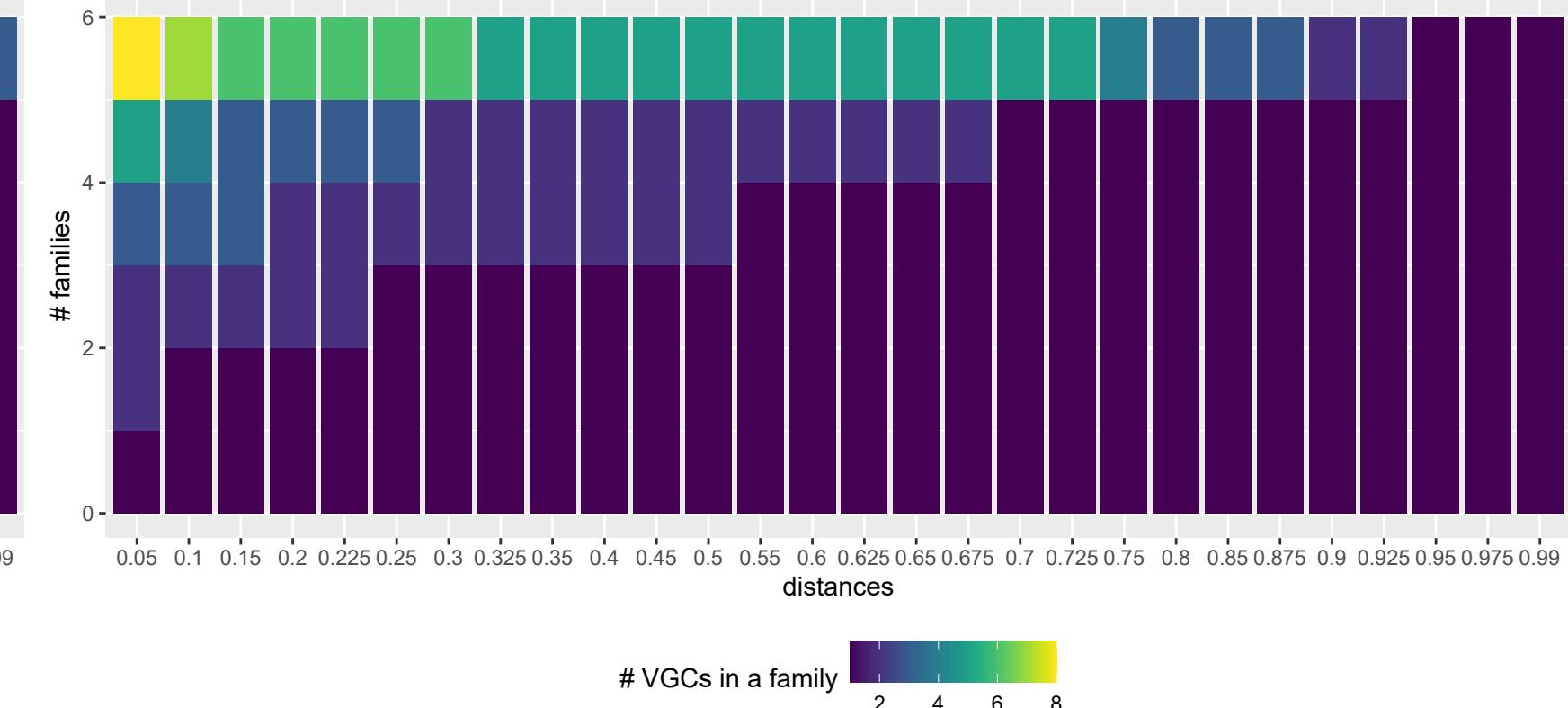
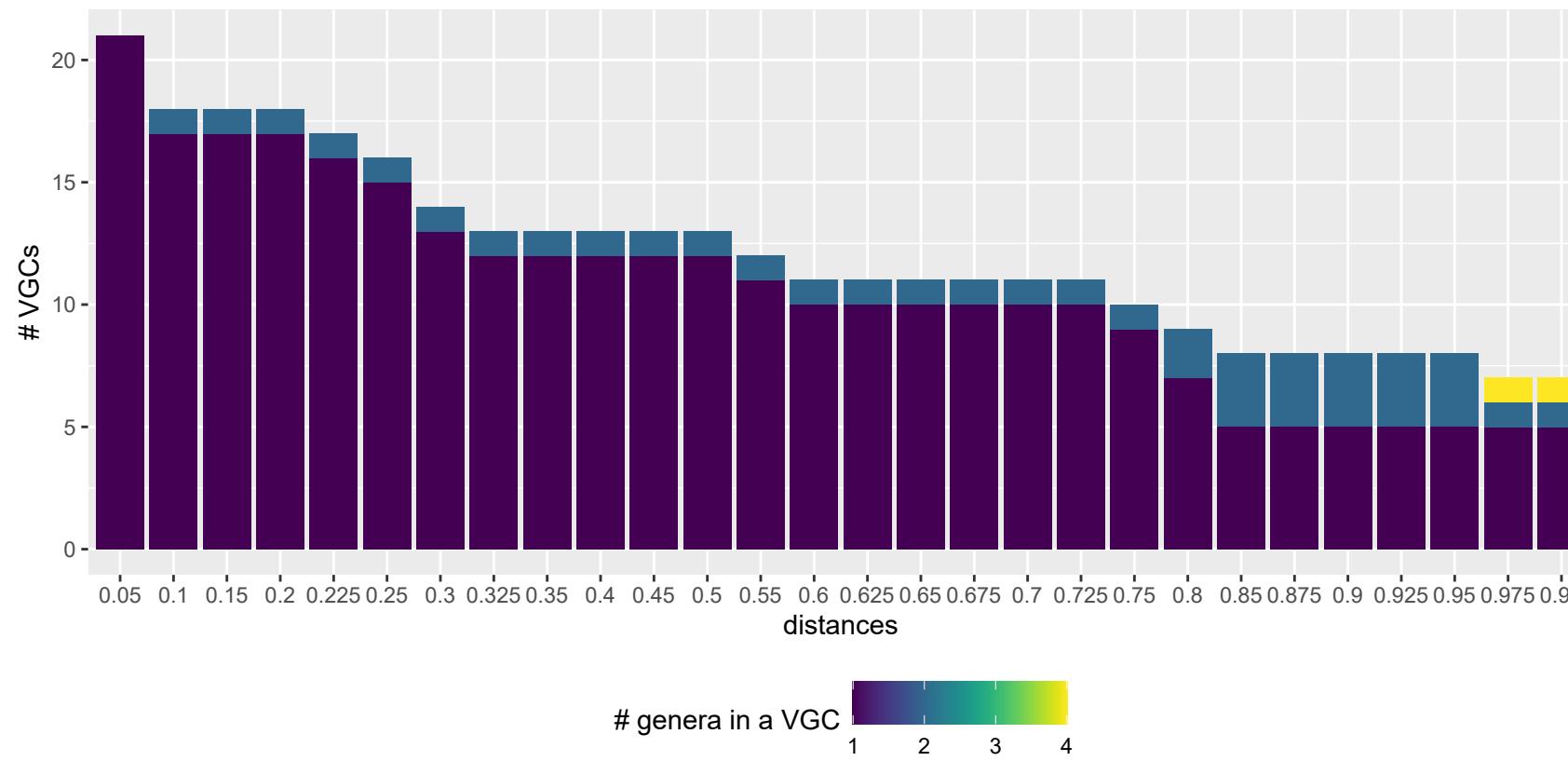
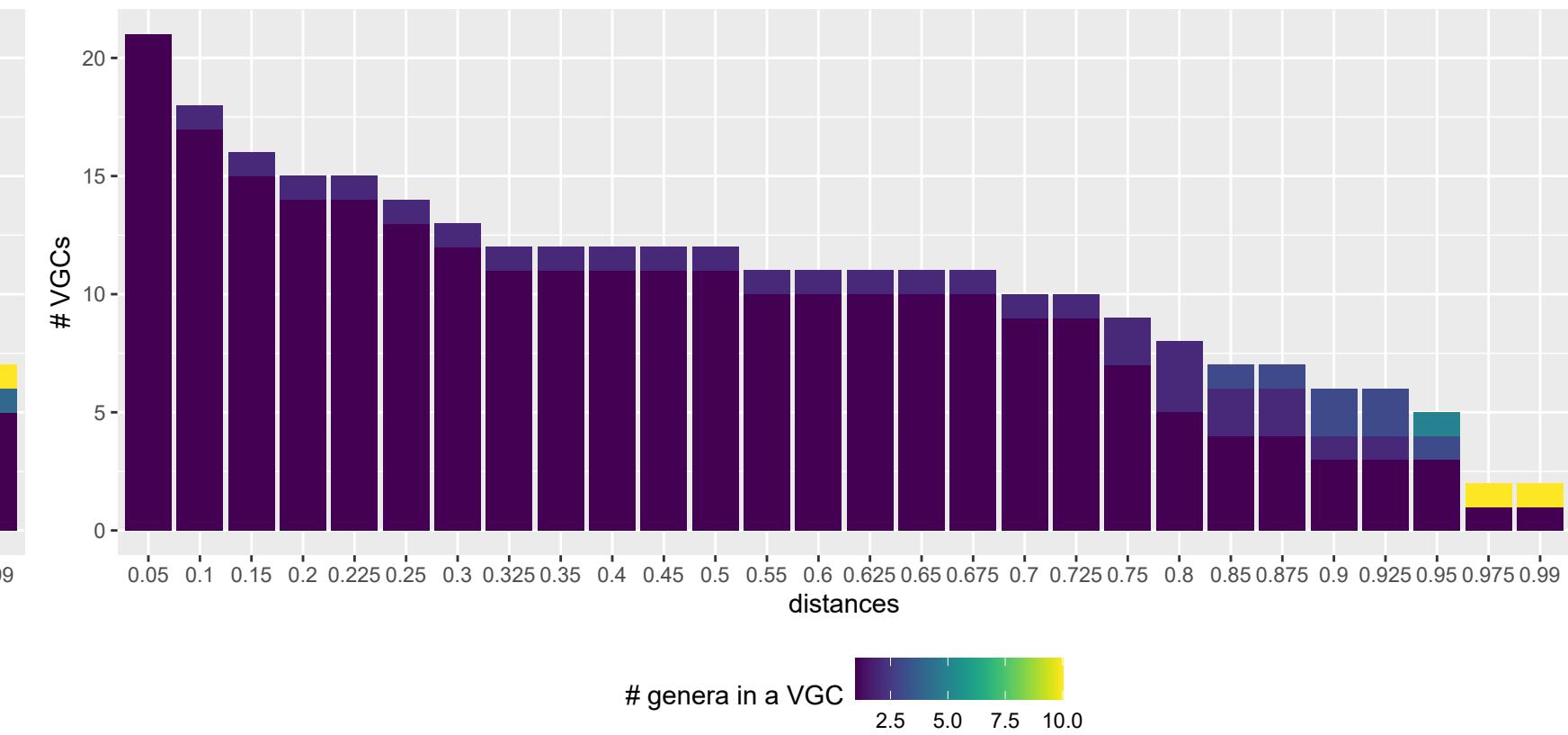


Fig. S5: Relationship between the number of VGCs and families for *Varidnaviria*, when the PC- and PSC-based genomic trees of the Fam_DB dataset were cut with different intergenomic distances.

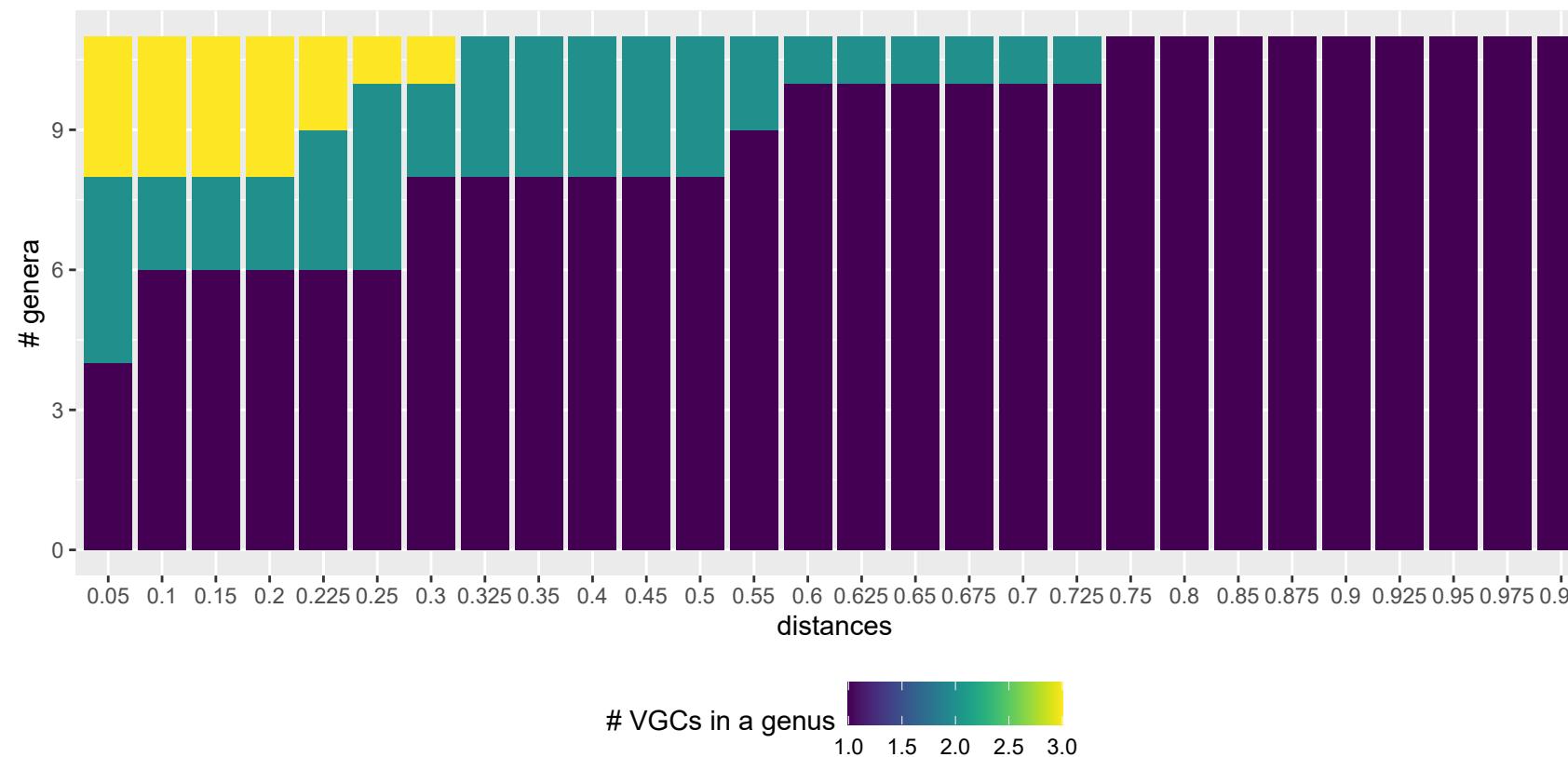
A PCs - VGCs with different number of genera



C PSCs - VGCs with different number of genera



B PCs - genera with different number of VGCs



D PSCs - genera with different number of VGCs

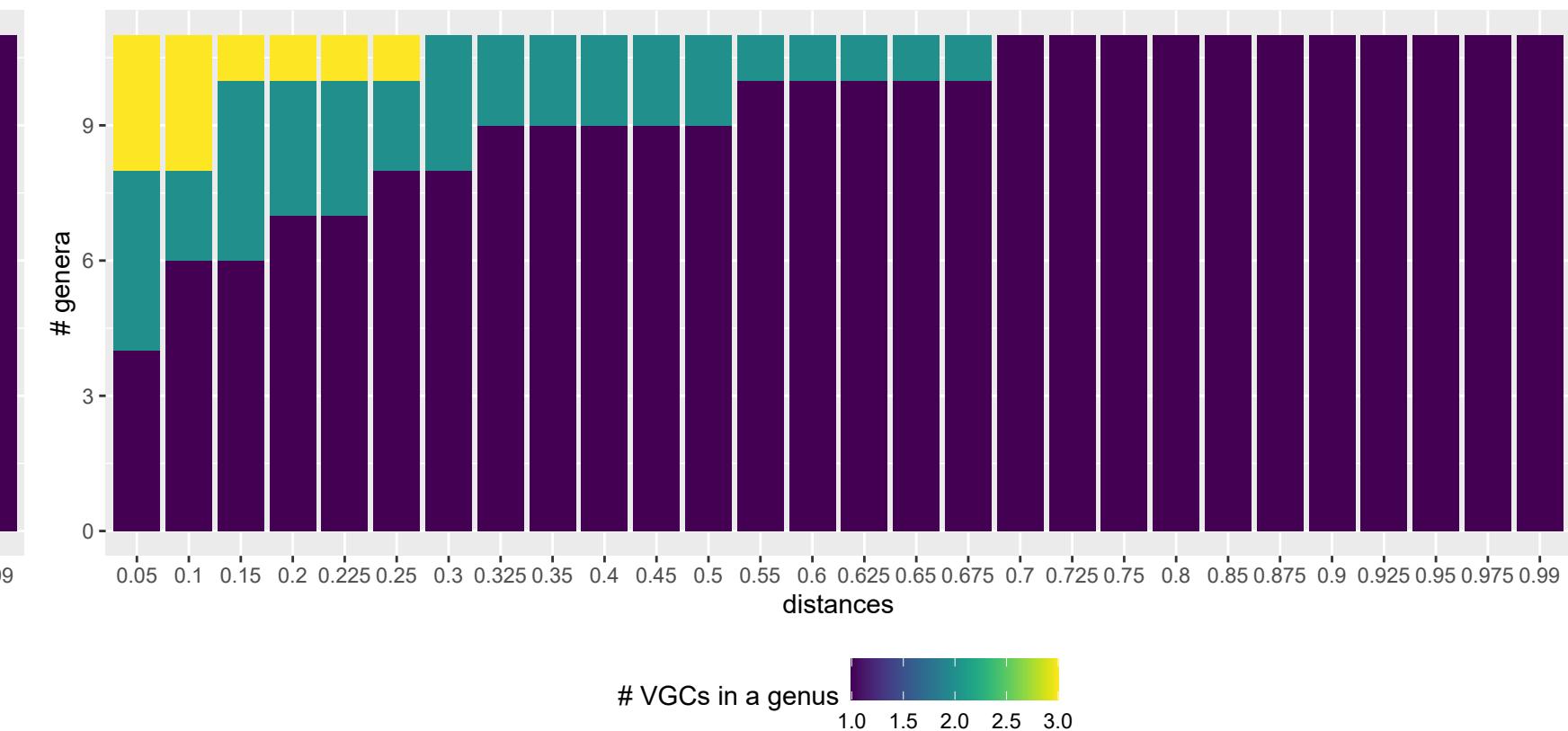


Fig. S6: Relationship between the number of VGCs and genera for *Varidnaviria*, when the PC- and PSC-based genomic trees of the Fam_DB dataset were cut with different intergenomic distances.