

**A**

**Model A**  
**G1 mandatory**  
**G2 mandatory**  
**G4 mandatory**  
**G3 accessory**  
exchangeable G7  
**G5 accessory loner**  
**G10 accessory**  
**G13 neutral**

**Quorum**  
min\_mandatory\_genes = 2  
min\_genes = 4

**Distance Constraints**  
inter\_gene\_max\_space = 1

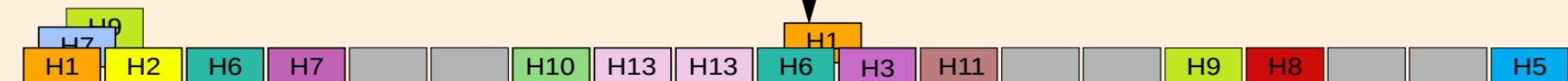
**Genomic Architecture**  
multi\_loci = True

**Model B**  
**G2 mandatory**  
**G6 mandatory**  
**G8 mandatory**  
**G9 accessory**  
**G10 accessory**  
**G11 accessory**

Models parsing, list genes to search

G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G11, G13

hmmssearch, sort hits according to position



For each position, assign the best match

