**S5. Hierarchical analysis of molecular variance (AMOVA) among 10 sampling sites of *H. fulgens*.** AMOVA to examine the partitioning of genetic variance at four hierarchical levels among regional groups of populations identified by previous analysis, and with different hypothesized structures: **A)** administrative zones, **B)** two groups based on STRUCTURE results, **C)** three groups based on *FST* results, **D)** three groups based on DAPC and UPGMA results, and **E)** four groups based on visual division on the DAPC results. Significant values are shown in bold (*p* < 0.05).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **d.f** | **Fixation index** | **Variation (%)** | ***p-*value** |
| **A) Administrative zones** |   |   |   |  |
| Among groups (***FCT***) | 2 | 0.0003 | 0.03 | 0.297 |
| Among populations within groups (***FSC***) | 7 | 0.0055 | 0.55 | **0.000** |
| Among individuals within populations (***FIS***) | 165 | 0.0041 | 0.41 | 0.387 |
| Within individuals (***FIT***) | 175 | 0.0099 | 99.01 | 0.243 |
| **B) 2 Groups (GI, all other localities) based on STRUCTURE results** |
| Among groups (***FCT***) | 1 | 0.0148 | 1.48 | 0.096 |
| Among populations within groups (***FSC***) | 8 | 0.0023 | 0.23 | **0.000** |
| Among individuals within populations (***FIS***) | 165 | 0.0041 | 0.41 | 0.380 |
| Within individuals (***FIT***) | 175 | 0.0212 | 97.88 | 0.240 |
| **C) 3 Groups (GI, SJI, all other localities) based on *FST* results**  |
| Among groups (***FCT***) | 2 | 0.0126 | 1.26 | **0.0230** |
| Among populations within groups (***FSC***) | 7 | 0.0011 | 0.11 | **0.0241** |
| Among individuals within populations (***FIS***) | 165 | 0.0041 | 0.41 | 0.3745 |
| Within individuals (***FIT***) | 175 | 0.0178 | 98.22 | 0.2423 |
| **D) 3 Groups (GI, SJI+ FSJ, all other localities based on DAPC and UPGMA results** |
| Among groups (***FCT***) | 2 | 0.0104 | 1.04 | **0.0059** |
| Among populations within groups (***FSC***) | 7 | 0.0009 | 0.09 | **0.0274** |
| Among individuals within populations (***FIS***) | 165 | 0.0041 | 0.41 | 0.3979 |
| Within individuals (***FIT***) | 175 | 0.0155 | 98.45 | 0.2454 |
| **E) 4 Groups (GI, SJI, FSJ, all other localities based** **on visual division on the DAPC results** |
| Among groups (***FCT***) | 3 | 0.0112 | 1.12 | **0.0088** |
| Among populations within groups (***FSC***) | 6 | 0.0005 | 0.05 | 0.2227 |
| Among individuals within populations (***FIS***) | 165 | 0.0041 | 0.41 | 0.3879 |
| Within individuals (***FIT***) | 175 | 0.0158 | 98.42 | 0.2500 |
|  |  |  |  |  |