

The clustering analysis of *Platycladus orientalis* (Figure 3) showed that red represents Cluster I, blue represents Cluster II, and yellow represents Cluster III. Cluster I contained 13 individuals, including 7 from Shanting District, 4 from Tengzhou City, and 1 from Yicheng District. Cluster II contained 23 individuals, including 21 from Shanting District and 2 from Shizhong District. Cluster III contained 64 individuals, including 40 from Shanting District, 15 from Tengzhou City, 8 from Yicheng District, and 1 from Shizhong District.

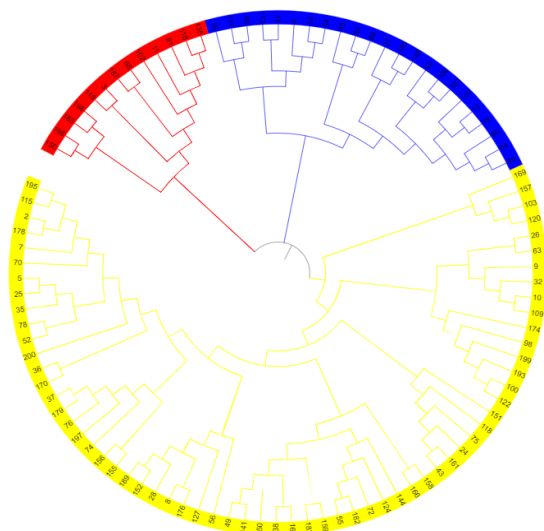


Figure 3 Phylogenetic tree of *Platycladus orientalis* based on SSR data

Using NTSYS software, UPGMA clustering analysis based on Nei's genetic distance was performed on 100 samples from four populations (Figure 4).

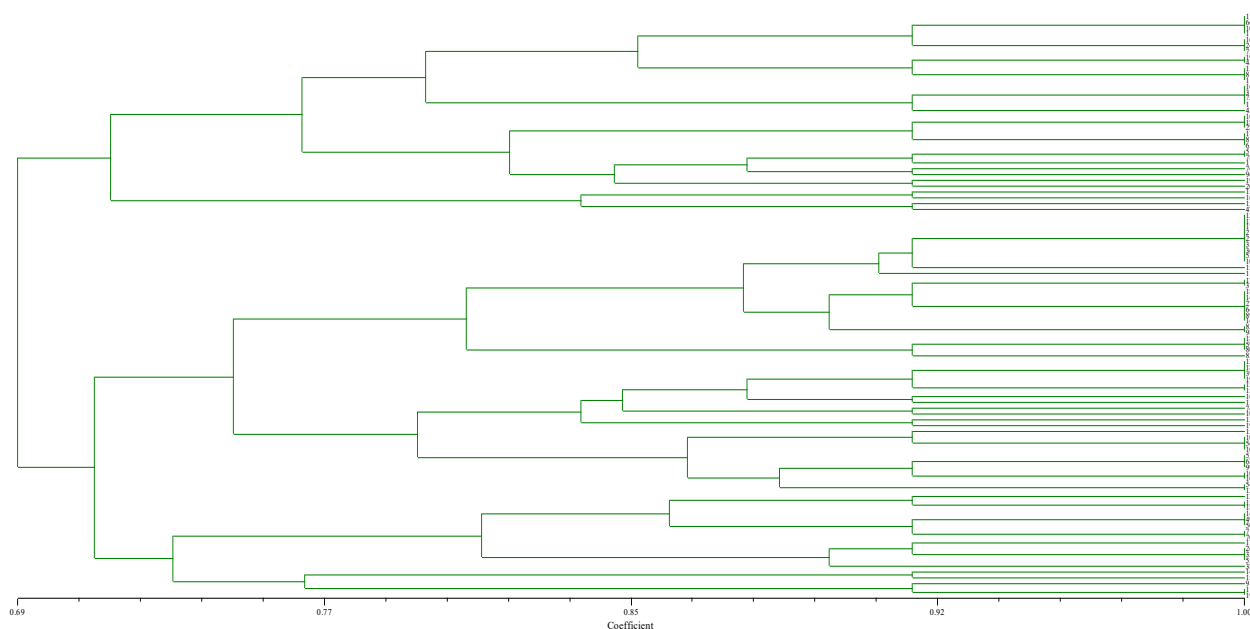


Figure 4 Dendrogram of *Platycladus orientalis* based on SSR data

At a similarity coefficient of approximately 0.69, the samples were divided into two clusters. Samples 135, 137, 141, and 145 collected from Shizhong District, which showed relatively close kinship, were grouped together with samples from other regions, while samples from the remaining regions were not strictly clustered according to their geographic origins. At a similarity coefficient of approximately 0.70, four clusters were identified, and the collected samples still did not cluster according to the four sampling regions. When the genetic similarity coefficient reached 0.77, the 100 *Platycladus orientalis* accessions were divided into eight clusters.