

Table S10 Gene family clustering statistical information of *V. bracteatum* and other six species

| Item | Fvesca | Rdelav | Roccid | Rwilli | Slycop | Vbract | Vvinif |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Number of genes | 28,588 | 32,938 | 26,771 | 23,548 | 33,741 | 36,756 | 29927 |
| Number of genes in orthogroups | 22,110 | 26,531 | 18,809 | 20,005 | 23,870 | 28,662 | 22380 |
| Number of unassigned genes | 6,478 | 6,407 | 7,962 | 3,543 | 9,871 | 8,094 | 7547 |
| Percentage of genes in orthogroups | 77.3 | 80.5 | 70.3 | 85.0 | 70.7 | 78.0 | 74.8 |
| Percentage of unassigned genes | 22.7 | 19.5 | 29.7 | 15.0 | 29.3 | 22.0 | 25.2 |
| Number of orthogroups containing species | 16,506 | 18,163 | 15,538 | 15,782 | 15,720 | 17,753 | 16,178 |
| Percentage of orthogroups containing species | 54.2 | 59.7 | 51.0 | 51.8 | 51.6 | 58.3 | 53.1 |
| Number of species-specific orthogroups | 795 | 689 | 530 | 160 | 2,295 | 1,400 | 816 |
| Number of genes in species-specific orthogroups | 2,630 | 1,963 | 1,300 | 389 | 7,430 | 4,877 | 2547 |
| Percentage of genes in species-specific orthogroups | 9.2 | 6.0 | 4.9 | 1.7 | 22.0 | 13.3 | 8.5 |

Note: Number of genes: number of genes of each species; Number of genes in orthogroups: number of genes involved in clustering; Number of unassigned genes: number of genes not involved in clustering; Percentage of genes in orthogroups: proportion of genes involved in clustering; Percentage of unassigned genes: proportion of genes not involved in clustering; Number of orthogroups containing species: number of gene families of the species; Percentage of orthogroups containing species: the proportion of gene families of this species in all gene families; Number of species-specific orthogroups: the number of gene families specific to the species; Number of genes in species-specific orthogroups: the number of genes contained in species-specific gene families; Percentage of genes in species-specific orthogroups: proportion of genes contained in species-specific gene families.