**Figure S1**. Color map on pairwise correlations for the 76 OIV ampelographic traits recorded on the 36 Greek grapevine cultivars.

****

d.

c.

b.

a.

**Figure S2**. a: Upper and lower side of mature leaf from cultivar “Araklinos”. b: Upper and lower side of mature leaf from cultivar “Mavrotragano”. c: Typical bunch of cultivar “Araklinos”. d: Typical bunch of cultivar “Mavrotragano”.

**Table S1.** Cultivars (cv), main purpose, color, area of cultivation and number of independent genotypes per cv. analyzed in the framework of the present study [according to Mattheou et al. (2006); Stavrakas (2010); Vlachos (1991)].

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | cv name in English\* | cv code | Main purpose | Color | Area of cultivation | Number of analyzed genotypes per cv |
| 1 | Agiorgitiko | 19A | Wine | Colored | Peloponnese | 2 |
| 2 | Aidani mavro | 10B | Wine | Colored | Cyclades | 3 |
| 3 | Akiki | 47D | Table | Colored | Crete | 2 |
| 4 | Araklinos | 10D | Wine | Colored | Cefalonia | 3 |
| 5 | Arkadino | 40C | Wine | White | Corfu | 3 |
| 6 | Askathari | 31B | Wine | White | Cyclades | 3 |
| 7 | Attiki | 53D | Table | Colored | All over Greece | 3 |
| 8 | Vilana | 42D | Wine | White | Crete | 2 |
| 9 | Votsiki | 37B | Wine | White | Epirus | 3 |
| 10 | Glykopati | 23B | Wine | Colored | Ionian islands | 2 |
| 11 | Thrapsathiri | 32A | Wine | White | Crete and South Aegean islands | 3 |
| 12 | Karvouniaris | 22E | Wine | Colored | South Peloponnese | 3 |
| 13 | Cardinal | 54B | Table | Colored | all Greece | 3 |
| 14 | Kozanitis | 39E | Wine | White | Ionian islands | 3 |
| 15 | Korithi lefko | 45C | Table | White | Ionian islands, Achaia | 3 |
| 16 | Korfiatis | 15A | Wine | Colored | Ionian islands | 3 |
| 17 | Kotsifali | 12B | Wine | Colored | Crete, Cyclades | 3 |
| 18 | Limniona | 16C | Wine | Colored | Thessaly | 3 |
| 19 | Malvazia | 30D | Wine | White | Crete, South Peloponnese | 3 |
| 20 | Mavro Spetson | 20B | Wine | Colored | Peloponnese, Cyclades | 3 |
| 21 | Mavrokorakas | 6B | Wine | Colored | Peloponnese, Ionian islands | 3 |
| 22 | Mavrotragano | 8C | Wine | Colored | Santorini | 3 |
| 23 | Moschardinia | 37E | Wine | White | Ionian islands | 2 |
| 24 | Moschato Amvourgou | 48A | Wine / Table | Colored | all Greece | 3 |
| 25 | Mpelenes | 37D | Wine | White | East Aegean islands | 2 |
| 26 | Ntempina | 40D | Wine | White | Epirus | 3 |
| 27 | Nychato | 45A | Table | Colored | Central and East Macedonia | 3 |
| 28 | Ksynomavro | 2A | Wine | Colored | West and Central Macedonia | 3 |
| 29 | Pardala | 18C | Wine | Colored | Cyclades, Sterea Ellada | 2 |
| 30 | Provatina | 31E | Table | Colored | Zakinthos, Achaia | 3 |
| 31 | Rousiko | 31D | Wine | White | Euboea, Cyclades | 2 |
| 32 | Savvatiano | 27C | Wine | White | Sterea Ellada, Euboea, Macedonia, Cyclades | 2 |
| 33 | Sefka | 17B | Wine | Colored | Macedonia, Thrace | 3 |
| 34 | Skylopnichtis kokkinos | 23D | Wine | Colored | Peloponnese, Sterea Ellada | 2 |
| 35 | Soultanina | 45E | Table | White | Crete, Peloponnese, Macedonia | 2 |
| 36 | Chimoniatiko | 46E | Table | White | Central Macedonia | 2 |

\* Transliterated from Greek according to ISO 843-1997

**Table S2.** Ampelographic traits (descriptors) employed in the framework of the present study [according to OIV (2009)].

|  |  |
| --- | --- |
| Characteristic | OIV Code number |
| Young shoot  | Aperture (opening) of the shoot tip | 001 |
| Distribution of anthocyanin coloration on prostrate hairs of the shoot tip | 002 |
| Intensity of anthocyanin coloration on prostrate hairs of the shoot tip | 003 |
| Density of prostrate hairs on the shoot tip | 004 |
| Density of erect hairs on the shoot tip | 005 |
| Shoot | Attitude (before tying) | 006 |
| Color of the dorsal side of internodes | 007 |
| Color of the ventral side of internodes | 008 |
| Color of the dorsal side of nodes | 009 |
| Color of the ventral side of nodes | 010 |
| Density of erect hairs on nodes | 011 |
| Density of erect hairs on internodes | 012 |
| Density of prostrate hairs on nodes | 013 |
| Density of prostrate hairs on internodes  | 014 |
| Intensity of anthocyanin coloration on the bud scales | 015-2 |
| Vigor of shoot growth | 351 |
| Number of consecutive tendrils | 016 |
| Length of tendrils | 017 |
| Young leaf  | Color of the upper side of blade | 051 |
| Intensity of anthocyanin coloration of six distal leaves | 052 |
| Density of prostrate hairs between main veins on lower side of blade | 053 |
| Density of erect hairs between main veins on lower side of blade | 054 |
| Density of prostrate hairs on main veins on lower side of blade | 055 |
| Density of erect hairs on main veins on lower side of blade | 056 |
| Mature leaf | Size of blade | 065 |
| Shape of blade  | 067 |
| Number of lobes  | 068 |
| Color of the upper side of blade | 069 |
| Area of anthocyanin coloration of the main veins on the upper side of the blade  | 070 |
| Area of anthocyanin coloration of the main veins on the lower side of the blade | 071 |
| Goffering of blade | 072 |
| Undulation of blade between main or lateral veins | 073 |
| Profile of blade in cross section | 074 |
| Blistering of upper side of blade | 075 |
| Shape of teeth | 076 |
| Size of teeth in relation to blade size  | 077 |
| Length of teeth compared with their width (at the end of the base) | 078 |
| Degree of opening/overlapping of petiole sinus  | 079 |
| Shape of base of petiole sinus | 080 |
| Petiole sinus base limited by veins | 081-2 |
| Degree of opening/overlapping of upper lateral sinuses  | 082 |
| Shape of the base of upper lateral sinuses | 083-1 |
| Density of prostrate hairs between main veins (on lower side of blade) | 084 |
| Density of erect hairs between main veins (on lower side of blade) | 085 |
| Density of prostrate hairs on main veins (on lower side of blade) | 086 |
| Density of erect hairs on main veins (on lower side of blade) | 087 |
| Prostrate hairs on main veins (on upper side of blade) | 088 |
| Erect hairs on main veins (on upper side of blade) | 089 |
| Density of prostrate hairs on petiole | 090 |
| Density of erect hairs on petiole | 091 |
| Length of petiole compared to length of middle vein | 093 |
| Woody shoot | Cross section | 101 |
|  | Structure of surface | 102 |
|  | Main color | 103 |
| Lenticels | 104 |
| Flower/Inflorescence | Sexual organs | 151 |
|  | Number of inflorescences per shoot | 153 |
| Bunch | Length (peduncle excluded) | 202 |
| Density | 204 |
| Length of peduncle of primary bunch | 206 |
| Lignification of peduncle | 207 |
| Berry | Length | 220 |
| Uniformity of size | 222 |
| Shape | 223 |
| Cross section  | 224 |
| Color of skin | 225 |
| Uniformity of skin color | 226 |
| Hilum | 229 |
| Intensity of flesh anthocyanin coloration  | 231 |
| Juiciness of flesh | 232 |
| Firmness of flesh | 235 |
| Particular flavor | 236 |
| Length of pedicel | 238 |
| Ease of detachment from pedicel | 240 |
| Formation of seeds | 241 |
| Length of seeds | 242 |