

Supplementary Materials

Supplementary Table S1. Quantitative characters

Quantitative characters	
1.	Beak (Stalk) Ventral Length, mm (7)
2.	Beak (Stalk) at Junction Width, mm (5)
3.	Seed Length mm (1)
4.	Seed Chalaza Shield Width, mm (10)
5.	Seed Chalaza Shield Length, mm (9)
6.	Seed Body Length, mm
7.	Prism Volume Index, mm cube
8.	Beak (Stalk) Basal End thickness, mm (8)
9.	Maximum Width, mm (2)
10.	Maximum Thickness, mm (3)
11.	Beak (Stalk) Dorsal Length, mm (6)
12.	Distance from Chalaza Apex to Seed Apex mm (11)
13.	Beak (Stalk) Basal End Width mm (4)

Note: at the end are indicated the numbers in Supplementary figure 1. Only eleven, those numbered at the end here and in Supplementary table 1 were considered for the study of Medieval grapevine seeds.

Supplementary Table S2. Qualitative characters

Qualitative characters	
1.	Radial Furrows, presence - absence.
2.	Outline, five categories.
3.	Fossettes, four categories

Note: radial furrows were missing in all Medieval seeds.

Supplementary Table S3. Allometric characters

Allometric characters	
1.	Width/Thickness Index
2.	Width/Length Index (Stummer)
3.	Union Beak Width/Union Beak Thickness Index
4.	Seed Width/Seed Chalaza Shield Width Index
5.	Seed Thickness/Beak Thickness at Union Index
6.	Seed Sphericity
7.	Seed Length/Seed Chalaza Shield Length Index
8.	Seed Chalaza Shield Width/Length Index
9.	Beak Width/Beak Length Index
10.	Beak Length/Seed Length Index (Facsar-Perret)
11.	Distance Apex Index/Seed Chalaza Shield Length Index
12.	Cumulative Length Index/Total Length

Supplementary Table S4. Stummer's index for wild and domesticated grapevine seeds¹.

Range of values	Taxa
44-53	<i>V. vinifera</i>
54-75	Intermediate or hybrids
76-83	<i>V. sylvestris</i>

¹ Formula: B/L x 100.

Supplementary Table S5. Facsar - Perret's index for wild and domesticated grapevine seeds¹.

Range of values	Taxa
12-18	<i>V. sylvestris</i>
19-30	<i>V. vinifera</i>

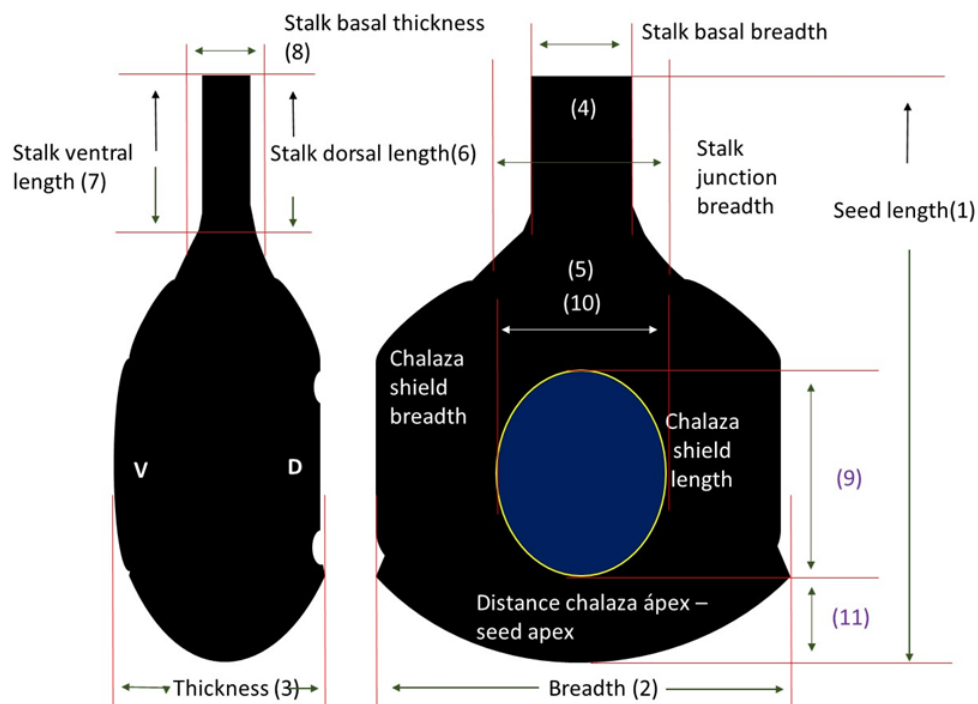
¹ Formula: LS/L x 100. LS: stalk lengt, L: seed length.

Supplementary Table S6. Mangafa and Kotsakis's indexes for wild and domesticated grapevine seeds¹.

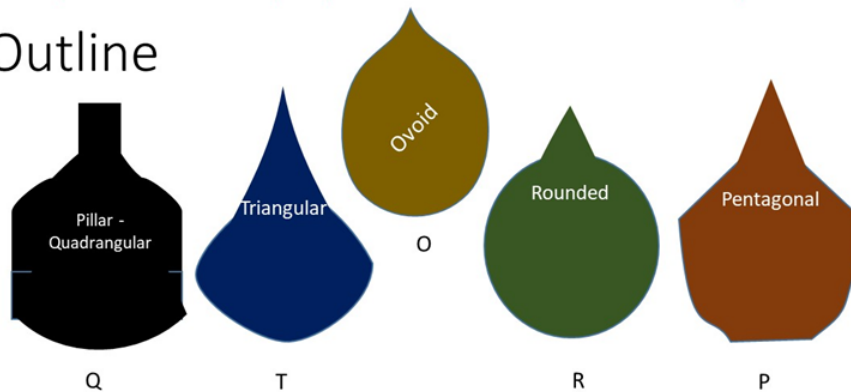
Range of values	Taxonomic information
Range of values (Formula 1)	Seed classification
< -0.2	Wild grapes
-0.2 < x < 0.2	Wild grapes (64.7% probability to be wild)
0.2 < x < 0.8	Domesticated grapes (76.2% probability to be cultivated)
> 0.8	Domesticated grapes
Range of values (Formula 2)	Seed classification
< -0.2	Wild grapes
-0.2 < x < 0.4	Wild grapes (64.7% probability to be wild)
0.4 < x < 0.9	Domesticated grapes (76.2% probability to be cultivated)
> 0.9	Domesticated grapes
Range of values (Formula 3)	Seed classification
< 0	Wild grapes
0 < x < 0.5	Wild grapes (90.1% probability to be wild)
0.5 < x < 0.9	Domesticated grapes (63.3% probability to be cultivated)
> 0.9	Domesticated grapes
Range of values (Formula 4)	Seed classification
< -0.9	Wild grapes
-0.9 < x < 0.2	Wild grapes (90.1% probability to be wild)
0.2 < x < 1.4	Domesticated grapes (63.3% probability to be cultivated)
> 1.4	Domesticated grapes

¹ Formula 1: $-0.3801 + (-30.2 \text{ LS/L}) + 0.4564 \text{ PCH} - 1.386 \text{ L} + 2.88 \text{ PCH/L} + 9.4239 \text{ LS}$; Formula 2: $0.2951 + (-12.64 \text{ PCH/L} - 1.6416 \text{ L} + 4.5131 \text{ PCH} + 9.63 \text{ LS/L})$; Formula 3: $-7.491 + (1.7715 \text{ PCH} + 0.49 \text{ PCH/L} + 9.56 \text{ LS/L})$; Formula 4: $0.7509 + (-1.5748 \text{ L} + 5.297 \text{ PCH} - 14.47 \text{ PCH/L})$. LS, stalk length; L, seed length; PCH, chalaza position.

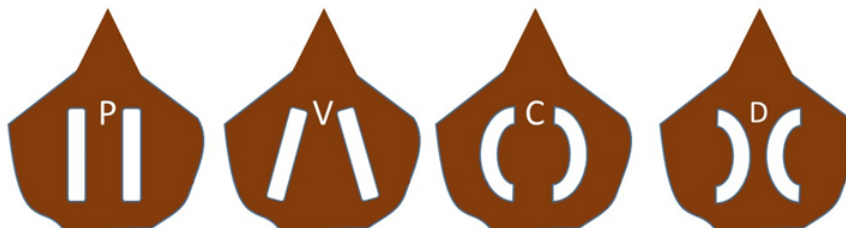
Seed dimensions



Outline



Fossettes



Supplementary Figure S1. Qualitative and quantitative characters analysed in grapevine seeds.