

Samples of *Beta vulgaris* used in the study. Sampled individuals are coded by their mitochondrial haplotype, and indexed when several individuals sharing the same haplotype were sequenced. The location (including the country) and the geographical coordinates of the populations they were sampled from are provided. B = Belgium, F = France, S = Spain, NL = Netherlands. ⁽¹⁾ mtDNA haplotypes following the nomenclature described in Desplanque *et al.* (2000).

Sample Code	mtDNA haplotype⁽¹⁾	Sexual phenotype	Geographical Location	GPS coordinates
A1	A	hermaphroditic	Wimereux (F)	N 50°46.1' ; E 1°36.6'
A2	A	hermaphroditic	Agde (F)	N 43°18.0' ; E 3°28.0'
A3	A	hermaphroditic	Mèze (F)	N 43°25.0' ; E 3°26.0'
A4	A	hermaphroditic	Suzac (F)	N 45°38.0' ; W 0°52.0'
B1	B	hermaphroditic	Talmont (F)	N 45°32.0' ; W 0°54.0'
B2	B	hermaphroditic	Criel (F)	N 50°02.2' ; E 1°19.0'
C	C	hermaphroditic	Audresselles (F)	N 50°49.4' ; E 1°35.4'
D	D	hermaphroditic	Erromardie (F)	N 43°23.0' ; W 1°39.0'
E1	E	female	Avignonnet-en-L. (F)	N 43°21.0' ; E 1°47.0'
E2	E	female	Etaples (F)	N 50°30.9' ; E 1°38.4'
F1	F	hermaphroditic	Gruissan (F)	N 43°06.0' ; E 3°05.0'
F2	F	hermaphroditic	Zwin (NL)	N 51°22.0' ; E 3°22.0'
G	G	female	Etaples (F)	N 50°30.9' ; E 1°38.4'
H	H	female	St Puy (F)	N 43°52.0' ; E 0°27.0'
I1	I	hermaphroditic	Ferrals (F)	N 43°08.0' ; E 2°43.0'
I2	I	hermaphroditic	Bram (F)	N 43°14.0' ; E 2°06.0'
K	K	hermaphroditic	Elvas (SP)	N 38°52.4' ; W 7°11.8'
L	L	hermaphroditic	Vega (SP)	N 36°13.4' ; W 5°52.2'
M	M	hermaphroditic	Bénissa (SP)	N 38°42.0' ; E 0°24.0'
N	N	unknown	Sierra Espuna (SP)	N 37°53.3' ; W 1°29.5'
O	O	hermaphroditic	Montaigut-sur-Save (F)	N 43°41.0' ; E 1°13.0'
P1	P	unknown	Mèze (F)	N 43°25.0' ; E 3°26.0'
P2	P	unknown	Crevillente (SP)	N 38°13.8' ; W 0°49.2'
S	S	unknown	Ells Muntels (SP)	N 40°38.5' ; E 0°44.5'
T1	T	unknown	Ells Muntels (SP)	N 40°38.5' ; E 0°44.5'
T2	T	unknown	Albox (SP)	N 37°23.2' ; W 2°07.9'
U	U	unknown	La Hoya (SP)	N 37°42.2' ; W 1°36.1'
Nv1	Nvulg	hermaphroditic	Béziers (F)	N 43°20.0' ; E 3°13.0'
Nv2	Nvulg	hermaphroditic	Burghsluis (NL)	N 51°40.0' ; E 3°44.0'
Nv3	Nvulg	hermaphroditic	Newport (B)	N 51°09.0' ; E 2°43.0'
Nv4	Nvulg	hermaphroditic	La Maye (F)	N 50°37.2' ; E 1°15.7'
Nv5	Nvulg	hermaphroditic	Q1 (cultivated) (F)	-
Sv1	Svulg	female	Ault (F)	N 50°06.4' ; E 1°27.2'
Sv2	Svulg	female	Warrior 1 (cultivated)(F)	-
Sv3	Svulg	female	NO11 (cultivated) (F)	-