

MATERIAL SUPPLEMENTARY

Supplementary Table 1. Combinations of allergens recognized by patients with Cypress+Olive double sensitization.

Cup s 1	Ole e 1	Ole e 2	Ole e 3	Ole e 7	NtD-Ole e 9	CtD-Ole e 9	Ole e 11	Ole e 12	N	%
+	+	-	-	-	-	-	-	-	21	27.3
-	+	-	-	-	-	-	-	-	17	22.1
+	-	-	-	-	-	-	-	-	9	11.7
-	-	-	-	-	-	-	-	-	7	9.1
+	+	-	-	-	-	+	-	-	4	5.2
+	-	-	-	-	-	-	+	-	3	3.9
+	+	-	-	-	-	-	+	-	3	3.9
-	+	-	-	-	-	-	+	-	2	2.6
+	+	-	-	-	-	+	+	-	2	2.6
-	+	-	+	-	-	-	-	-	1	1.3
+	+	-	-	-	-	-	-	+	1	1.3
-	-	-	-	-	-	-	+	-	1	1.3
+	+	+	-	-	-	-	+	-	1	1.3
-	+	-	-	-	-	-	+	+	1	1.3
+	+	-	-	-	-	-	+	+	1	1.3
-	+	-	-	-	+	+	-	-	1	1.3
-	+	-	-	-	+	-	-	-	1	1.3
+	+	-	+	-	+	+	+	-	1	1.3
Total									77	100

Supplementary Table 2. Results of IgE quantification by Indirect ELISA to extracts of cypress, olive and individual allergens.

		C+O group N= 77	C group N= 21	O group N= 15	P value
Olive extract	Median (IQR)	0.34 (0.06 - 0.64)	0.04 (0.03 - 0.21)	0.01 (0 - 0.04)	.002
	Positive (≥ 0.10 OD)	54 (70.1%)	1 (4.8%)	4 (26.7%)	<.001
Cypress extract	Median (IQR)	0.06 (0.02 - 0.15)	0.11 (0.06 - 0.17)	0.09 (0.06 - 0.12)	.186
	Positive (≥ 0.10 OD)	33 (42.9%)	12 (57.1%)	7 (46.7%)	.507
Ole e 1	Median (IQR)	0.45 (0.1 - 1.25)	0 (0 - 0.01)	0.03 (0.03 - 0.19)	<.001
	Positive (≥ 0.10 OD)	57 (74%)	0	5 (33.3%)	<.001
Ole e 2	Median (IQR)	0 (0 - 0.01)	0.01 (0 - 0.02)	0.01 (0 - 0.03)	.21
	Positive (≥ 0.10 OD)	1 (1.3%)	1 (4.8%)	0	.538
Ole e 3	Median (IQR)	0 (0 - 0.02)	0 (0 - 0.01)	0 (0 - 0.01)	.828
	Positive (≥ 0.10 OD)	2 (2.6%)	0	0	1
Ole e 7	Positive (≥ 0.10 OD)	0	0	0	
NtD-Ole e 9	Median (IQR)	0 (0 - 0.01)	0.01 (0 - 0.04)	0.04 (0.01 - 0.08)	<.001
	Positive (≥ 0.10 OD)	3 (3.9%)	0	3 (20%)	.045
CtD-Ole e 9	Median (IQR)	0.03 (0 - 0.05)	0.05 (0.02 - 0.1)	0.05 (0.02 - 0.08)	.016
	Positive (≥ 0.10 OD)	8 (10.4%)	5 (23.8%)	2 (13.3%)	.251
Ole e 9	Positive (≥ 0.10 OD)	9 (11.7%)	5 (23.8%)	5 (33.3%)	.06
Ole e 11	Median (IQR)	0.03 (0 - 0.08)	0.05 (0.03 - 0.1)	0.05 (0.02 - 0.07)	.055
	Positive (≥ 0.10 OD)	15 (19.5%)	5 (23.8%)	2 (13.3%)	.767
Ole e 12	Median (IQR)	0.02 (0 - 0.04)	0.01 (0 - 0.03)	0.02 (0.01 - 0.03)	.781
	Positive (≥ 0.10 OD)	3 (3.9%)	0	2 (13.3%)	.173
Ole e	Positive (≥ 0.10 OD)	61 (79.2%)	9 (60%)	9 (42.9%)	.004

Minor Ole e	Positive (≥ 0.10 OD)	23 (29.9%)	9 (42.9%)	6 (40%)	.425
Cup s 1	Median (IQR)	0.17 (0.05 - 0.39)	0.26 (0.17 - 0.85)	0.02 (0 - 0.03)	<.001
	Positive (≥ 0.10 OD)	46 (59.7%)	19 (90.5%)	1 (6.7%)	<.001
Bromelain	Median (IQR)	0 (0 - 0)	0 (0 - 0)	0 (0 - 0)	.235
	Positive (≥ 0.10 OD)	6 (7.8%)	4 (19%)	3 (20%)	.145

C+O, Cypress+Olive; C, Cypress; O, Olive; interquartile range (Q1-Q3); Minor Ole e, any minor olive allergen; Ole e, any olive allergen; Ole e 9, NtD-Ole e 9 and/or CtD-Ole e 9 positive value; OD, Optical Density

Supplementary Table 3. Sensitization profile to minor olive allergens in the four subgroups of Cypress+Olive allergic patients depending on positive or negative response to Cup s 1 and Ole e 1.

Ole e allergen	G1 Cup s 1+/Ole e1 + N= 34	G2 Cup s 1+/Ole e1 - N=12	G3 Cup s 1-/Ole e1 + N= 23	G4 Cup s 1-/Ole e1 - N= 8
NtD-Ole e 9	1 (2.9%)		2 (8.7%)	
CtD-Ole e 9	7 (20.6%)		1 (4.3%)	
Ole e 9	7 (20.6%)		2 (8.7%)	
Ole e 11	8 (23.5%)	3 (25%)	3 (13%)	1 (12.5%)
Ole e12	2 (5.9%)		1 (4.3%)	
Ole e 2	1 (2.9%)			
Ole e 3	1 (2.9%)		1 (4.3%)	
Minor Ole e	13 (38.2%)	3 (25%)	6 (26.1%)	1 (12.5%)

Minor Ole e, any minor olive allergen; Ole e 9, NtD-Ole e 9 and/or CtD-Ole e 9 positive value