

SUPPLEMENTARY DATA

TABLE S1. Perianth traits of two different population types, Guadalquivir river Basin–Strait of Gibraltar and Sebou river Basin, of *Narcissus papyraceus*.

Variable (mm)	Guadalquivir river Basin and Strait of Gibraltar			Sebou river Basin			Differences between regions
	L	S	P-value	L	S	P-value	P-value
Corolla diameter	30.79 ± 4.64	30.81 ± 5.93	0.980	36.25 ± 4.77	37.63 ± 4.49	1.00 [◊]	<0.0001
Tube length	14.63 ± 1.79	14.79 ± 2.08	0.260	20.93 ± 2.61	20.89 ± 2.58	0.95	<0.0001
Corona diameter	6.82 ± 1.29	6.54 ± 1.35	0.002 [◊]	6.62 ± 1.19	6.63 ± 1.18	0.16	0.002
Corona length	3.87 ± 0.63	3.84 ± 0.69	0.57 [◊]	3.81 ± 0.71	3.89 ± 0.76	0.76	0.103
Tube diameter	4.34 ± 0.55	4.58 ± 0.60	1.00 [◊]	4.02 ± 0.60	4.10 ± 0.76	0.14	<0.0001

Differences between morphs and populations were calculated by Student's *t* test, except [◊] calculated by Wilcoxon rank sum test.

TABLE S2. Results of ANCOVA models for the effects of flower tube length (covariate) on different response variables related to sex organs, according to morph (L, S), and population type (Guadalquivir – Strait of Gibraltar vs Sebou river; see text for details).

	SS	d.f.	F	P
Response variable: Style length				
Flower tube	595.672	1	246.1776	<0.0001
Morph	25.9646	1	10.7306	0.0011
PopType	15.8268	1	5.7349	0.0172
Pob[PopType]	270.706	9	12.4307	<0.0001
Flower tube*Morph	99.6097	1	41.1664	<0.0001
Flower tube*PopType	0.02457	1	0.0102	0.9198
Flower tube*Morph*PopType	1.25283	1	0.5178	0.472
Response variable: Upper anther height				
Flower tube	2237.1	1	3040.377	<0.0001
Morph	0.447	1	0.6075	0.436
PopType	0.94774	1	1.0937	0.2966
Pob[PopType]	102.319	9	15.451	<0.0001
Flower tube*Morph	0.36834	1	0.5006	0.4794
Flower tube*PopType	4.17456	1	5.6735	0.0174
Flower tube*Morph*PopType	0.31253	1	0.4247	0.5148
Response variable: Lower anther height				
Flower tube	1393.63	1	1152.739	<0.0001
Morph	0.3677	1	0.3041	0.5814
PopType	1.32241	1	0.9501	0.3304
Pob[PopType]	144.762	9	13.3044	<0.0001
Flower tube*Morph	2.5192	1	2.0838	0.1493
Flower tube*PopType	12.0732	1	9.9863	0.0016
Flower tube*Morph*PopType	0.10334	1	0.0855	0.7701

FIG. S1. Some of the pollinators captured during nocturnal and diurnal observations of *Narcissus papyraceus*. (A, B) Short-tongued pollinator (*Anthophora* sp.) in flowers from the Guadalquivir river Basin–Strait Gibraltar and Sebou river Basin populations, respectively. (C) Long-tongued pollinator (*Autographa gamma*) in a flower from Guadalquivir river Basin–Strait Gibraltar. (D) Empty anthers of *N. papyraceus* flower after being foraged by an *Andrena* sp. bee.



FIG. S2. Stigma–anther separation between reciprocal flowers of Guadalquivir river Basin–Strait Gibraltar (small-flowered) and Sebou river Basin (large-flowered) populations of *Narcissus papyraceus*.

