

A

Root

Seeds and Fruits

Leaves

Papilionaceous flower

B

A map of North Africa showing the locations of three *Hedysarum carnosum* lines. The map includes the coastlines of Tunisia, Algeria, and Libya. The city of Tunis is marked in Tunisia. Three lines are drawn across the map: line 1 is in the north (Tunisia), line 2 is in the center (Algeria), and line 3 is in the south (Libya).

	Locality and name of line	Climate	Altitude (m)	Longitude (E)	Latitude (N)	Soil characteristics
1	Karkar	semi-arid	33	10°62'52"	35°47'34"	saline-sodic
2	Thelja	arid	195	8°19'24.2"	34°19'32.4"	calcareous
3	Douiret	saharan	434	10°17'13.1"	32°50'58.0"	sandy

Supplementary Figure 1: Overview of *Hedysarum carnosum* plant material

(A) Morphology of *H. carnosum*; (B) Geographic distribution of collected Tunisian *H. carnosum* lines.