

Table S4. The leaf nitrogen (leaf-N) and phosphorous (leaf-P) composition ( $\text{mg g}^{-1}$ ). Mean values – for species when possible, or for plant family – from the literature were used [1-5] [References 31 to 35 in reference list of the manuscript]. For species/families with no information “Not Available” (NA) was introduced in the data matrix. The values were ranked as follows: for N – low ( $< 19 \text{ mg g}^{-1}$ ), medium ( $> 19$  and  $< 23 \text{ mg g}^{-1}$ ), high ( $> 23 \text{ mg g}^{-1}$ ), for P – low ( $< 1.1 \text{ mg g}^{-1}$ ), medium ( $> 1.1$  and  $< 1.7 \text{ mg g}^{-1}$ ), high ( $> 1.7 \text{ mg g}^{-1}$ ).

Family	Species	leaf-N	leaf-P
Amaranthaceae	<i>Chenopodium</i> sp	NA	NA
Amaryllidaceae	<i>Allium sphaerocephalon</i> L.	NA	NA
Apiaceae	spp.	high	high
Araliaceae	<i>Hedera helix</i> sl	low	high
Asparagaceae	<i>Muscari comosum</i> (L.) Mill.	low	low
Asteraceae	spp.	low	medium
Boraginaceae	<i>Echium plantagineum</i> L.	high	high
	<i>Myosotis discolor</i> Pers.	NA	NA
Brassicaceae	spp.	NA	NA
Campanulaceae	spp.	NA	NA
Caryophyllaceae	spp.	medium	NA
Cistaceae	<i>Cistus ladanifer</i> L	low	low
	<i>Cistus psilosepalus</i> Sweet	low	low
	<i>Cistus salviifolius</i> L.	medium	NA
	<i>Halimium lasianthum</i> subsp. <i>lasianthum</i> (Lam.) Spach	low	low
	<i>Helianthemum aegyptiacum</i> (L.) Mill.	low	low
Convolvulaceae	<i>Convolvulus arvensis</i> L.	NA	NA
Crassulaceae	spp.	NA	NA
Cytinaceae	<i>Cytinus hypocistis</i> (L.) L.	NA	NA
Dioscoreaceae	<i>Tamus communis</i> L.	NA	NA
Ericaceae	spp.	low	low
Euphorbiaceae	<i>Euphorbia</i> sp.	low	medium
Fabaceae	spp.	high	medium
Fagaceae	spp.	low	low
Geraniaceae	spp.	NA	NA
Hypericaceae	<i>Hypericum perforatum</i> L.	NA	NA
Lamiaceae	<i>Acinos alpinus</i> (L.) Moench	NA	NA
	<i>Clinopodium vulgare</i> L.	low	high
	<i>Lavandula pedunculata</i> (Mill.) Cav.	low	high
	<i>Mentha suaveolens</i> Ehrh.	NA	NA
	<i>Stachys arvensis</i> (L.) L.	NA	NA
	<i>Thymus mastichina</i> L.	low	high
Linaceae	<i>Linum bienne</i> Mill.	NA	NA
Lythraceae	<i>Lythrum salicaria</i> L.	NA	NA
Oleaceae	<i>Fraxinus angustifolia</i> Vahl	medium	NA
Orchidaceae	<i>Serapias lingua</i> L.	NA	NA
Orobanchaceae	spp.	NA	NA
Plantaginaceae	<i>Anarrhinum bellidifolium</i> (L.) Willd.	NA	NA
	<i>Digitalis purpurea</i> L.	low	low

Family	Species	leaf-N	leaf-P
	<i>Plantago lanceolata</i> L.	high	medium
Poaceae	spp.	low	medium
Polygalaceae	spp.	NA	NA
Polygonaceae	spp.	high	high
Ranunculaceae	<i>Ranunculus bulbosus</i> L.	high	high
Resedaceae	spp.	high	high
Rosaceae	<i>Crataegus monogyna</i> Jacq.	low	low
	<i>Prunus avium</i> L.	medium	NA
	<i>Rosa</i> sp.	low	low
	<i>Rubus</i> sp.	medium	NA
	<i>Rubus ulmifolius</i> var. <i>ulmifolius</i> Schott	medium	NA
	<i>Sanguisorba verrucosa</i> (Link ex G.Don) Ces.	medium	NA
Rubiaceae	spp.	low	low
Salicaceae	<i>Populus nigra</i> L.	NA	NA
Saxifragaceae	<i>Saxifraga granulata</i> L.	high	high
Thymelaeaceae	<i>Daphne gnidium</i> L.	low	low
Ulmaceae	<i>Ulmus minor</i> Mill.	high	medium
Xanthorrhoeaceae	<i>Simethis mattiazzii</i> (Vand.) Sacc.	high	high

## References

1. Margaris, N.S.; Adamandiadou, S.; Siafaca, L.; Diamantopoulos, J. Nitrogen and phosphorus content in plant species of Mediterranean ecosystems in Greece. *Vegetatio*. **1984**, *55*, 29–35. <https://doi.org/10.1007/BF00039978>
2. Badre, B.; Nobelis, P.; Trémolières. Quantitative study and modelling of the litter decomposition in a European alluvial forest. Is there an influence of overstorey tree species on the decomposition of ivy litter (*Hedera helix* L.). *Acta Oecol.* **1998**, *19*, 491–500. [https://doi.org/10.1016/S1146-609X\(99\)80003-4](https://doi.org/10.1016/S1146-609X(99)80003-4)
3. Tian, D.; Yan, Z.; Ma, S.; Ding, Y.; Luo, Y.; Chen, Y.; Du, E.; Han, W.; Kovacs, D.E.; Shen, H.; Hu, H., Kattge, J.; Schmid, B.; Fang, J. Family-level leaf nitrogen and phosphorus stoichiometry of global terrestrial plants. *Sci. China Life Sci.* **2019**, *8*, 1047–1057. <https://doi.org/10.1007/s11427-019-9584-1>
4. Mohammadzadeh, S.; Pirzad, A. Biochemical responses of mycorrhizal-inoculated Lamiaceae (Lavender, Rosemary and Thyme) plants to drought: a field study. *J. Soil Sci. Plant Nutr.* **2021**, *67*, 41–49. <https://doi.org/10.1080/00380768.2020.1851144>
5. Navarro, T.; Hidalgo-Triana, N. Variations in leaf traits modulate plant vegetative and reproductive phenological sequencing across arid Mediterranean shrublands. *Front. Plant Sci.* **2021**, *12*, 708367. <https://doi.org/10.3389/fpls.2021.708367>