

Supplementary Material

Fig. S1 -. Correlation among the studied traits at the species level. Values are Pearson’s r, and circles represent the size (the larger, the higher, and vice versa) and direction (red and blue indicate negative and positive correlation, respectively) of the relationship between trait pairs. In analyses, *Asparagus aphyllus*, *Astragalus* sp., *Genista acanthoclada*, and *Spartium junceum* were not considered due to lack of enough trait data (only four traits) in these species.

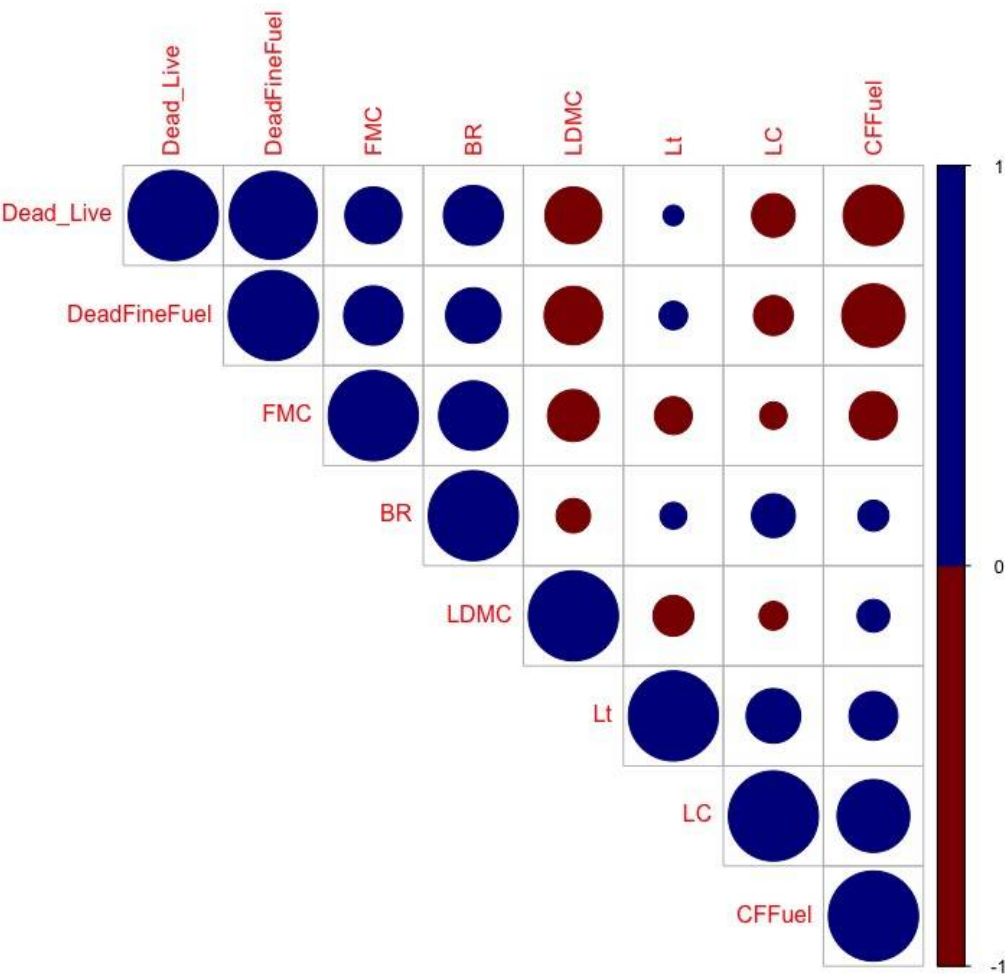


Fig. S2 - Variation in leaf dry matter content across species. Species are sorted based on their flammability level (high, moderate-high, moderate, moderate-low, and low flammability). Different colors in the graphics correspond to different flammability levels (from high to low flammability: red, orange, yellow, light green and dark green, respectively). In boxplots, the horizontal black line is the median; box limits indicate the 25th and 75th percentiles; the error lines represent the 5th and 95th percentiles; and each point corresponds to one plant individual measured. Species names are given as acronyms, with full names provided in Table 1. Letters placed above each boxplot summarize Tukey's post hoc test results; species labeled with different letters are significantly different at $p < 0.05$.

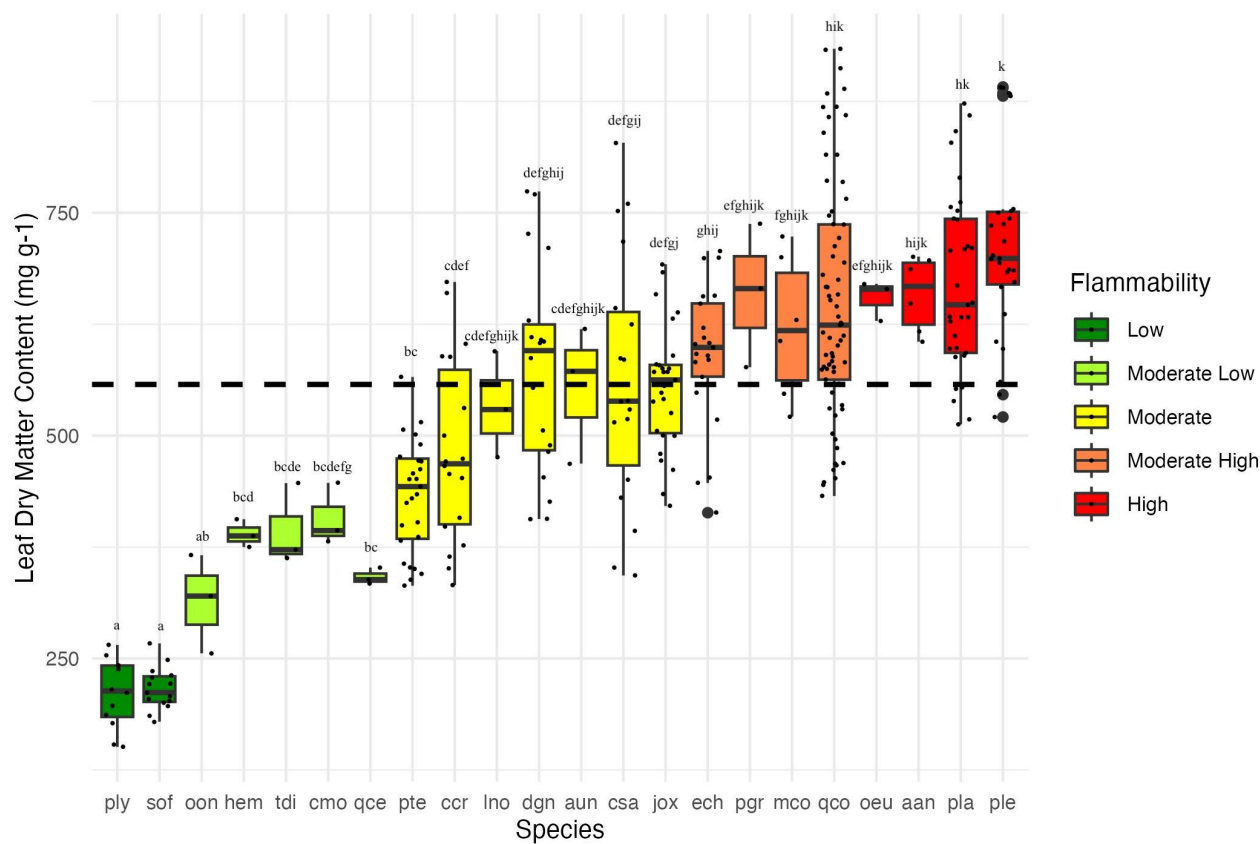


Fig. S3 - Variation in leaf moisture content across species. Graph properties and details are identical to those described in Fig. S2.

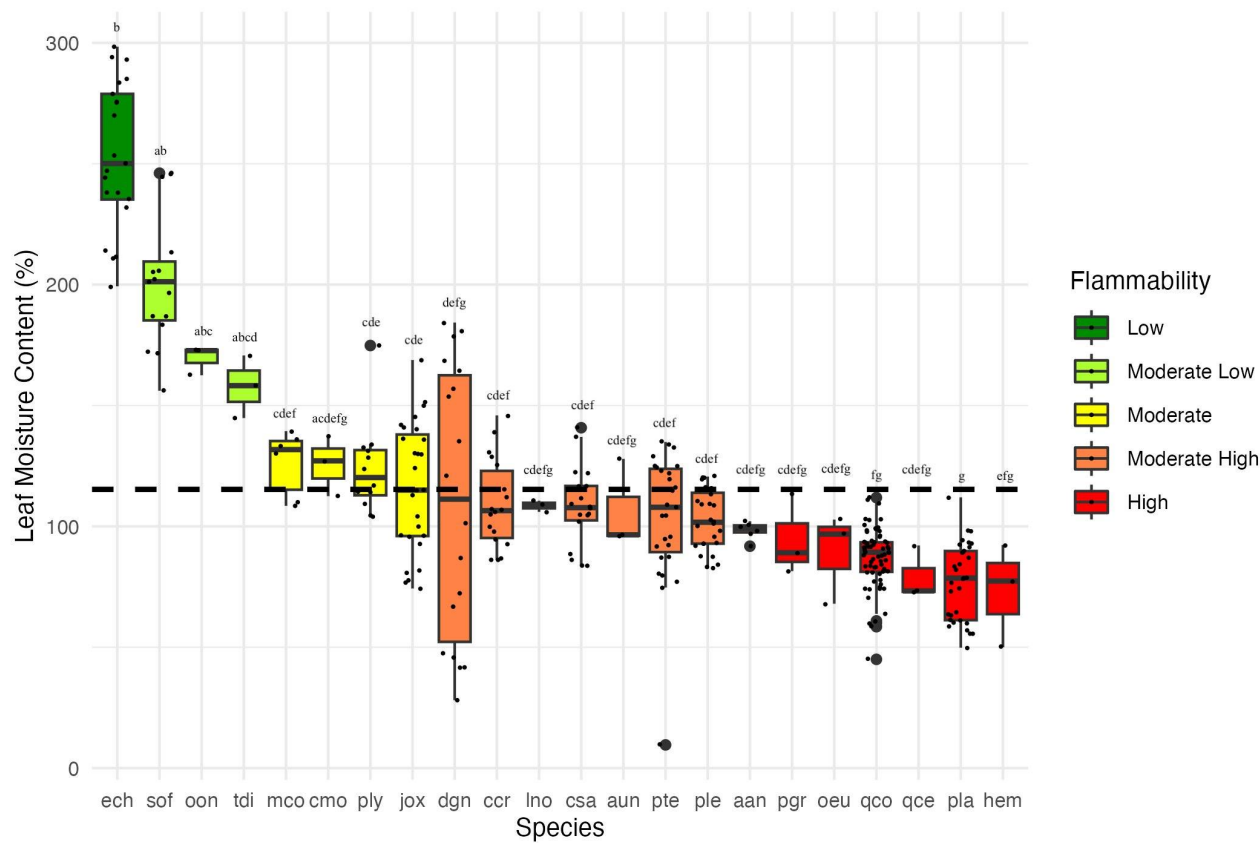


Fig. S4 - Variation in branching architecture across species. Graph properties and details are identical to those described in Fig. S2.

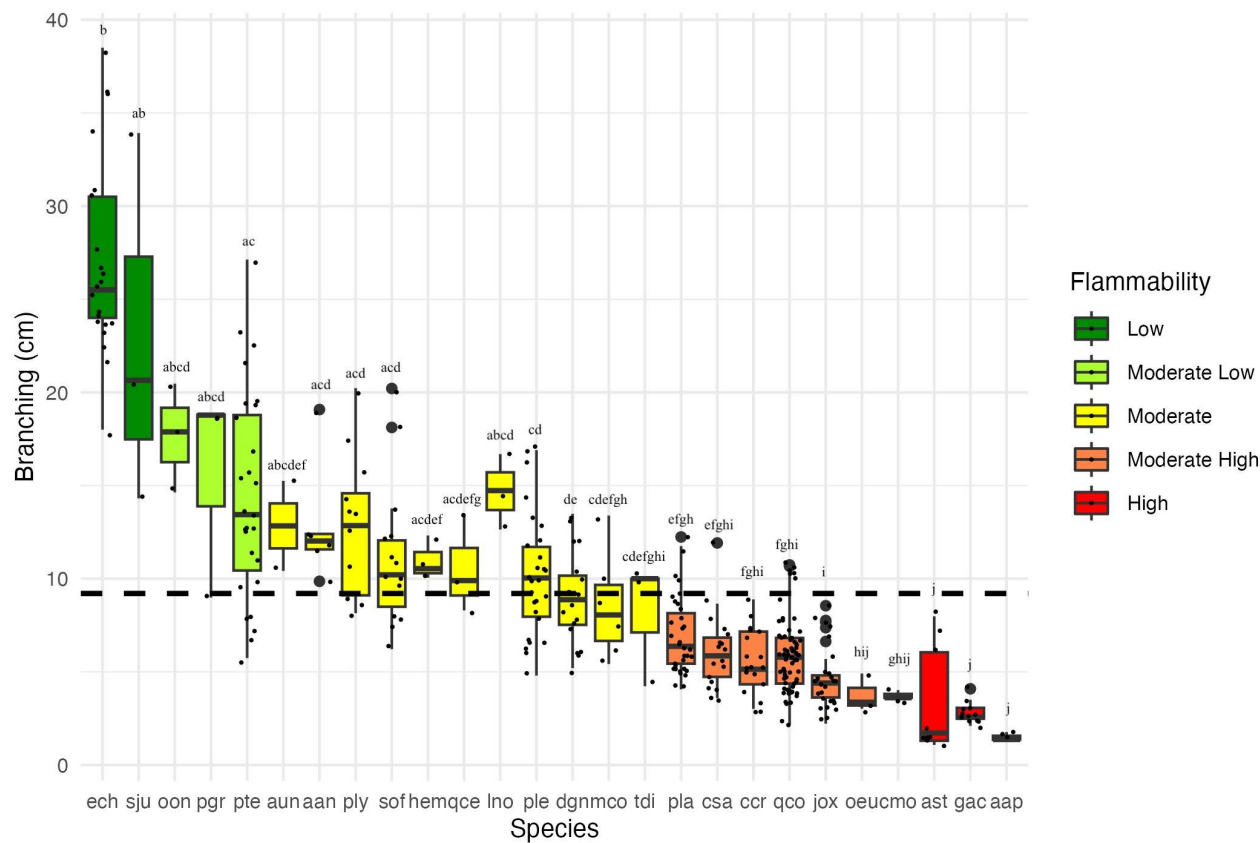


Fig. S5 - Variation in leaf curliness across species. Graph properties and details are identical to those described in Fig. S2.

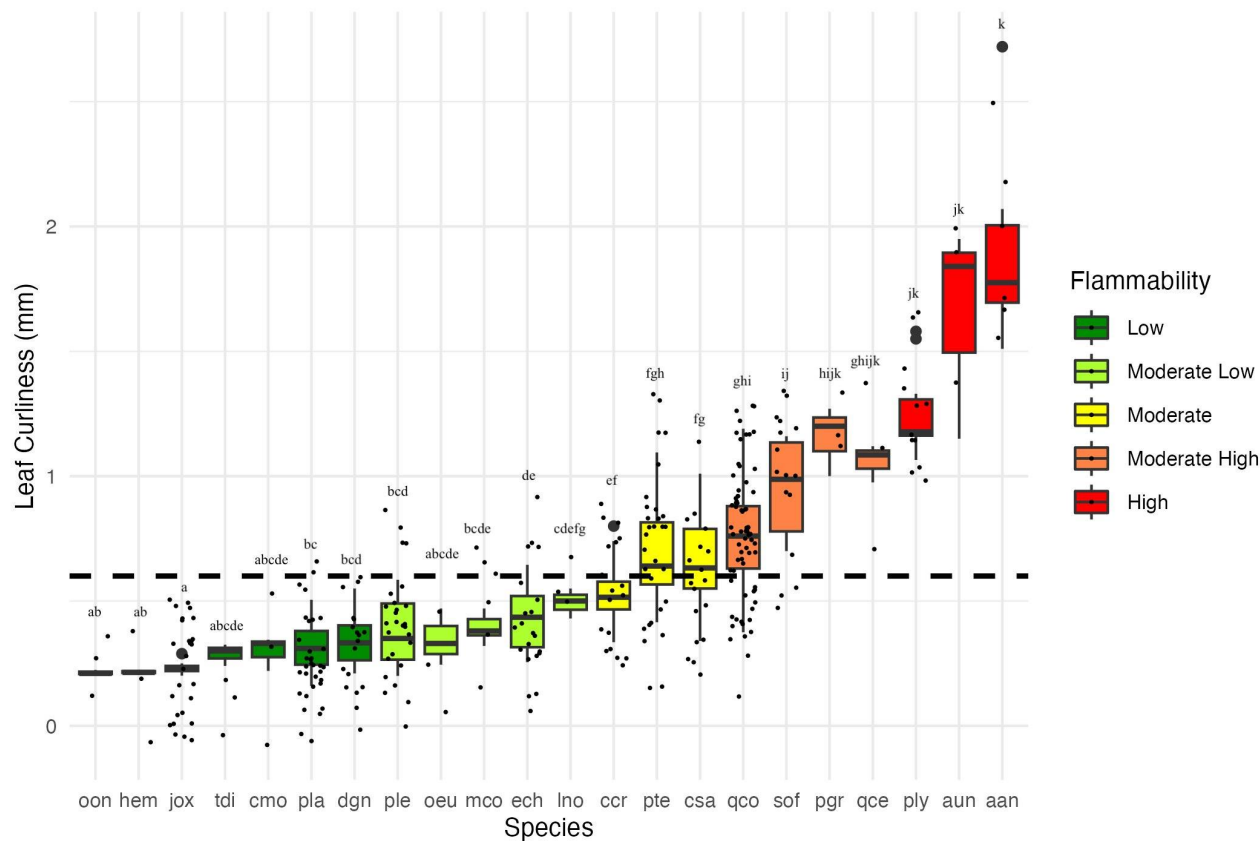


Fig. S6 - Variation in leaf thickness across species. Graph properties and details are identical to those described in Fig. S2.

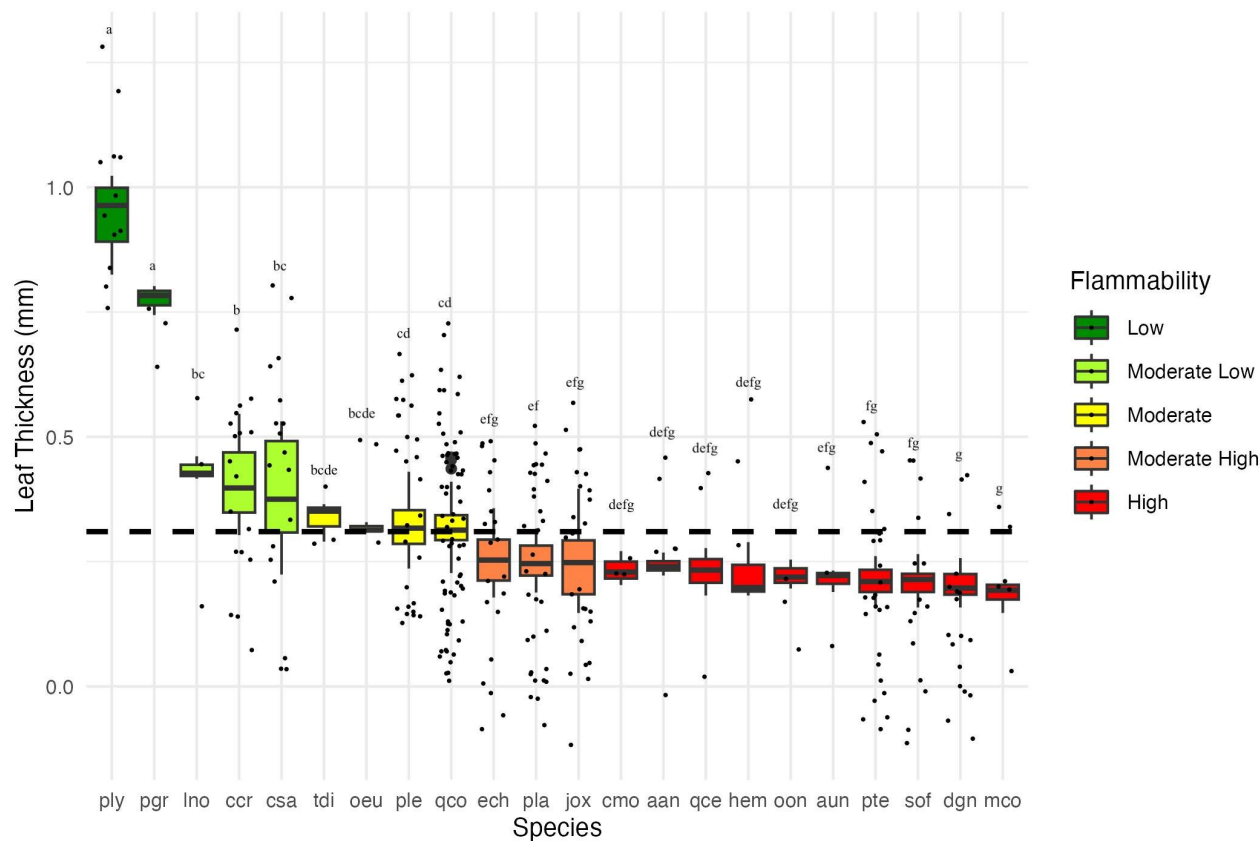


Fig. S7 - Variation in coarse to fine fuel ratio across species. Graph properties and details are identical to those described in Fig. S2.

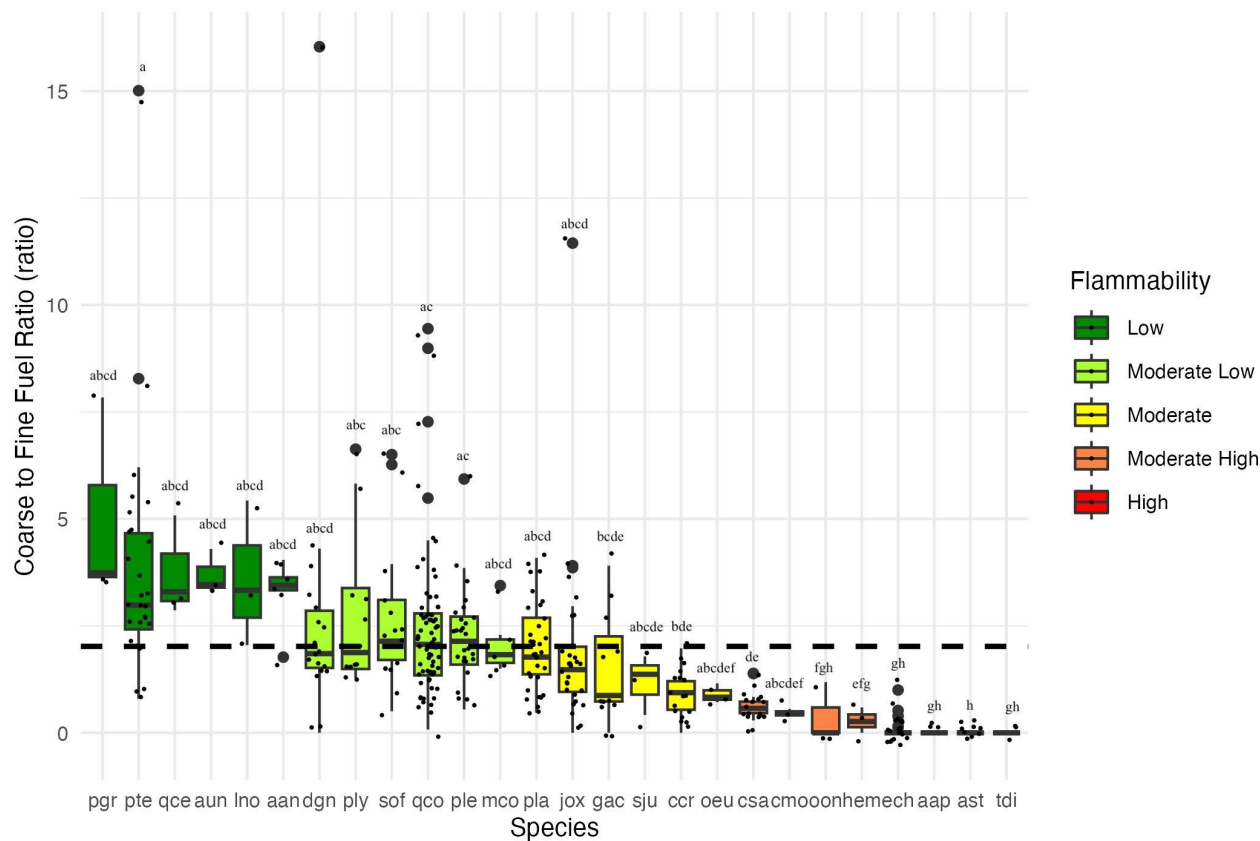


Fig. S8 - Variation in dead to live fuel ratio across species. Graph properties and details are identical to those described in Fig. S2.

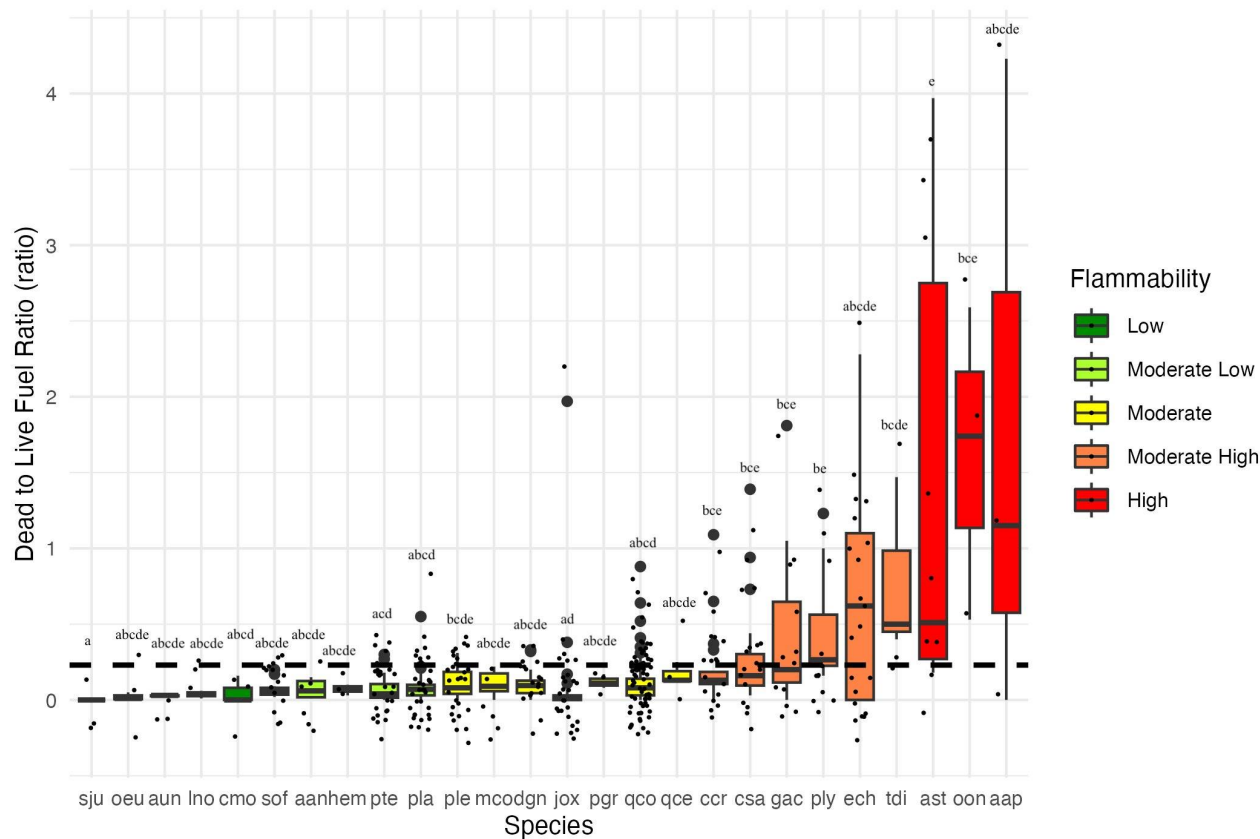
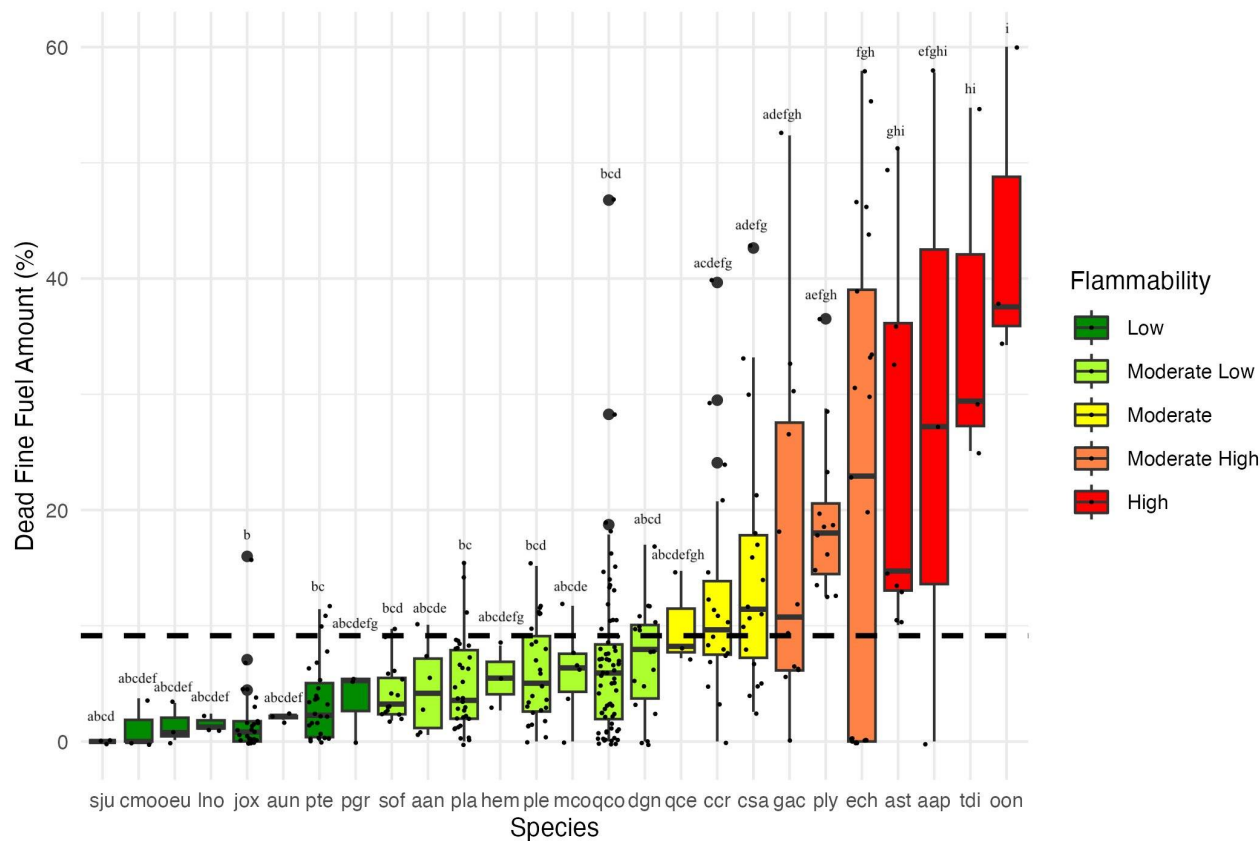


Fig. S9 - Variation in dead fine fuel amount across species. Graph properties and details are identical to those described in Fig. S2.



Tab. S1 - Species sampled for flammability traits in each study site. Geographic coordinates (decimal degrees) and altitude (m a.s.l.) of study sites are also given.

Site no	Latitude (°N)	Longitude (°E)	Altitude (m)	Sampled species
1	37.05535	27.99136	81	<i>Cistus creticus</i> , <i>Cistus salviifolius</i> , <i>Laurus nobilis</i> , <i>Myrtus communis</i> , <i>Quercus coccifera</i>
2	37.07243	27.99677	147	<i>Quercus coccifera</i> , <i>Cistus creticus</i> , <i>Pistacia terebinthus</i> , <i>Pistacia lentiscus</i> , <i>Hypericum empetrifolium</i>
3	37.06455	28.02579	230	<i>Arbutus andrachne</i> , <i>Arbutus unedo</i> , <i>Cistus creticus</i> , <i>Myrtus communis</i> , <i>Spartium junceum</i>
4	37.04076	28.23967	67	<i>Cistus salviifolius</i> , <i>Phillyrea latifolia</i> , <i>Pistacia lentiscus</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i>
5	37.04374	28.21943	74	<i>Asparagus aphyllus</i> , <i>Genista acanthoclada</i> , <i>Pistacia lentiscus</i> , <i>Quercus coccifera</i> , <i>Teucrium divaricatum</i>
6	37.05831	28.30318	104	<i>Cistus creticus</i> , <i>Olea europaea</i> , <i>Origanum onites</i> , <i>Quercus coccifera</i> , <i>Styrax officinalis</i>
7	37.15569	28.07803	1185	<i>Euphorbia characias</i> , <i>Juniperus oxycedrus</i> , <i>Phillyrea latifolia</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i>
8	37.15638	28.09526	1094	<i>Euphorbia characias</i> , <i>Juniperus oxycedrus</i> , <i>Phillyrea latifolia</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i>
9	37.15266	28.11208	1013	<i>Juniperus oxycedrus</i> , <i>Phillyrea latifolia</i> , <i>Pistacia terebinthus</i> , <i>Quercus cerris</i> , <i>Quercus coccifera</i>
10	37.10708	28.10008	1145	<i>Euphorbia characias</i> , <i>Juniperus oxycedrus</i> , <i>Phillyrea latifolia</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i>
11	37.09690	28.08675	1069	<i>Cistus creticus</i> , <i>Crataegus onogyna</i> , <i>Euphorbia characias</i> , <i>Juniperus oxycedrus</i> , <i>Quercus coccifera</i>
12	37.10493	28.09642	1130	<i>Daphne gnidioides</i> , <i>Euphorbia characias</i> , <i>Juniperus oxycedrus</i> , <i>Phlomis grandiflora</i> , <i>Quercus coccifera</i>
13	36.28242	29.38635	82	<i>Cistus creticus</i> , <i>Cistus salviifolius</i> , <i>Phillyrea latifolia</i> , <i>Pistacia lentiscus</i> , <i>Quercus coccifera</i>
14	36.28289	29.39451	112	<i>Cistus salviifolius</i> , <i>Genista acanthoclada</i> , <i>Phillyrea latifolia</i> , <i>Pistacia lentiscus</i> , <i>Quercus coccifera</i>
15	36.28181	29.40408	222	<i>Cistus salviifolius</i> , <i>Genista acanthoclada</i> , <i>Phillyrea latifolia</i> , <i>Pistacia lentiscus</i> , <i>Quercus coccifera</i>
16	36.33296	29.20817	103	<i>Arbutus andrachne</i> , <i>Cistus salviifolius</i> , <i>Phillyrea latifolia</i> , <i>Pistacia lentiscus</i> , <i>Quercus coccifera</i>
17	36.34009	29.20030	151	<i>Astragalus</i> sp., <i>Daphne gnidioides</i> , <i>Pistacia lentiscus</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i>
18	36.33389	29.23109	13	<i>Astragalus</i> sp., <i>Daphne gnidioides</i> , <i>Phillyrea latifolia</i> , <i>Pistacia lentiscus</i> , <i>Quercus coccifera</i>
19	36.36845	29.49248	972	<i>Astragalus</i> sp., <i>Daphne gnidioides</i> , <i>Phlomis grandiflora</i> , <i>Quercus coccifera</i> , <i>Styrax officinalis</i>
20	36.36083	29.48463	1121	<i>Daphne gnidioides</i> , <i>Euphorbia characias</i> , <i>Juniperus oxycedrus</i> , <i>Phlomis grandiflora</i> , <i>Quercus coccifera</i>

Site no	Latitude (°N)	Longitude (°E)	Altitude (m)	Sampled species
21	36.35047	29.47456	1156	<i>Daphne gnidioides</i> , <i>Genista acanthoclada</i> , <i>Juniperus oxycedrus</i> , <i>Phillyrea latifolia</i> , <i>Quercus coccifera</i>
22	36.40932	29.70858	1046	<i>Phlomis grandiflora</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i> , <i>Styrax officinalis</i>
23	36.40651	29.69628	1028	<i>Euphorbia characias</i> , <i>Pistacia terebinthus</i> , <i>Quercus coccifera</i> , <i>Styrax officinalis</i>
24	36.41375	29.71584	1097	<i>Juniperus oxycedrus</i> , <i>Phlomis grandiflora</i> , <i>Quercus coccifera</i> , <i>Styrax officinalis</i>

Tab. S2 - The number of individuals sampled and sampling sites for each species included in the study. The total number of leaf, branch and standing fuel samples taken from each species are also given.

Species	Number of samples				
	Individual	Site	Leaf	Branch	Standing fuel
<i>Arbutus andrachne</i>	6	2	60	12	6
<i>Arbutus unedo</i>	3	1	30	6	3
<i>Asparagus aphyllus</i>	3	1	30	6	3
<i>Astragalus</i> sp.	9	3	90	18	9
<i>Cistus creticus</i>	18	6	180	36	18
<i>Cistus salviifolius</i>	18	6	180	36	18
<i>Crataegus monogyna</i>	3	1	30	6	3
<i>Daphne gnidioides</i>	18	6	180	36	18
<i>Euphorbia characias</i>	21	7	210	42	21
<i>Genista acanthoclada</i>	12	4	120	24	12
<i>Hypericum empetrifolium</i>	3	1	30	6	3
<i>Juniperus oxycedrus</i>	27	8	270	54	27
<i>Laurus nobilis</i>	3	1	20	6	3
<i>Myrtus communis</i>	6	2	60	12	6
<i>Olea europaea</i>	3	1	30	6	3
<i>Origanum onites</i>	3	1	30	6	3
<i>Phlomis grandiflora</i>	3	1	30	6	3
<i>Phlomis lycia</i>	12	4	120	24	12
<i>Phillyrea latifolia</i>	33	11	330	66	33
<i>Pistacia lentiscus</i>	27	9	270	54	27
<i>Pistacia terebinthus</i>	27	9	270	54	27
<i>Quercus cerris</i>	3	1	30	6	3
<i>Quercus coccifera</i>	69	23	690	138	69
<i>Spartium junceum</i>	3	1	30	6	3
<i>Styrax officinalis</i>	15	5	150	30	15
<i>Teucrium divaricatum</i>	3	1	30	6	3

Tab. S3 - Value ranges of flammability level groups in each trait. Groups were determined based on significant differences ($P < 0.05$) among species after Tukey's test (see Methods for details). Therefore, these value ranges were used to assign species into a certain group.

Trait	Unit	Flammability level				
		High	Moderate high	Moderate	Moderate low	Low
LDMC	mg g ⁻¹	> 650.0	650.1 – 575.0	575.1 – 460.0	460.1 – 300.1	< 300.0
LMC	%	< 110.0	110.1 – 150.0	150.1 – 180.0	180.1 – 250.1	> 250.0
BR	cm	< 3.5	3.6 – 7.5	7.6 – 13.5	13.6 – 18.4	> 18.5
LC	mm	>1.100	1.101 – 0.750	0.749 – 0.500	0.499 – 0.351	< 0.350
LT	mm	< 0.245	0.246 – 0.300	0.301 – 0.350	0.351 – 0.499	> 0.499
DLF	-	> 1.000	1.001 – 0.200	0.199 – 0.100	0.099 – 0.061	< 0.060
CFF	-	< 0.20	0.21 – 0.80	0.81 – 2.00	2.01 – 2.99	> 3.00
DFF	%	> 23.00	22.99 – 16.00	15.99 – 8.00	7.99 – 4.01	< 4.00