Acknowledgements and references file

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Contributing datasets and Floras:

A number of datasets and Floras were used to collect additional plant trait data. Table 1 shows number of in house measurements, Table 2 shows the contribution of external datasets. Floras used include: Flore de l'Afrique du Nord[1], Flora of the British Isles[2], Flora of China[3], Flora Europaea[4], Exkursionsflora von Deutschland[5], Flora Hellenica[6], Flora Iberica[7], Flora of Japan[8], Flora Palaestina[9], and Flora of Turkey and the East Aegean Islands[10].

Table 1 Sources of in-house measurements and number of total measurements. Note institutions relate to affiliations under which the individual datasets were collected, or where the data are housed

Data sources	**Custodian (Institution)**	**Leaf area**	**Leaf thickness**	**SLA**
	Total measurements	5420	4158	5710
		Number (percentage) of records		
'In-house' measurements		4244 (78%)	3981 (96%)	4012(70%)
I. Archaeobotanical		2893 (53%)	2669 (64%)	2238 (39%)
FIBS1 (1994-1999)	Glynis Jones (Sheffield)	1197 (22%)	1138 (27%)	610 (11%)
FIBS2 (2000-2011)	Michael Charles (Sheffield)	1112 (21%)	957 (23%)	1089 (19%)
FIBS3 (2013-2022)	Amy Bogaard (Oxford)	536 (10%)	522 (13%)	510 (9%)
Mark Hudson (2000, unpubl.)	Glynis Jones (Sheffield)	48 (1%)	52 (1%)	29 (1%)
II. Ecological		1351 (25%)	1312 (32%)	1774 (31%)
UCPE (1984-1997)	John Hodgson (Sheffield)	742 (14%)	725 (17%)	1189 (21%)
POST UCPE (2000-2020)	John Hodgson (Sheffield)	530 (10%)	536 (13%)	524 (9%)
ZARAGOZA WORKSHOPS (1993-1997)	John Hodgson (Sheffield), Gabriel Montserrat Martí (Zaragoza)	79 (1%)	51 (1%)	61 (1%)

Table 2. Published data sources which contributed > 1% of records for leaf area, leaf thickness and/or specific leaf area (SLA). References to sources contributing <1% found in the 'others' row.

Reference	**Authors (database)**	**Leaf area**	**Leaf thickness**	**SLA**
	Total measurements	5420	4158	5710
		Number (percentage of records)		
Published measurements		1176 (21%)	177 (4%)	1698 (30%)
[11]	Kleyer, M. et al (LEDA database)	501 (9%)		957 (17%)
[12]	Cerabolini, B. E. L. et al. (Flora d'Italia Functional Traits Hoard (FIFTH))	195 (4%)		163 (3%)
[13]	Diaz, S. et al. (Sheffield-Iran-Spain Database)	109 (2%)	73 (2%)	67 (1%)
[14]	Tavşanoğlu, Ç. & Pausas, J. G (BROT Plant Trait Database)	83(2%)		167 (3%)
[15]	Májeková, M et al.	57 (1%)	54 (1%)	42 (1%)
[16]	Santini Gonzalez, B	56 (1%)		
[17]	Valerio, M., Ibáñez, R., Gazol, A. & Götzenberger, L.	54 (1%)		35 (1%)
[18]	Dalke, I.V., Novakovskiy, A.B., Maslova, S.P. & Dubrovskiy, Y.A.	46 (1%)		48 (1%)
[19]	Utkin, A., Ermolova, L., Utkina, I., Dulepova, N., Rosbakh, S.,			59 (1%)
[20]	May, F., Giladi, I., Ristow, M., Ziv, Y., Jelsch, F.			51 (1%)
[21–33]	Others (<1% contribution, per reference per trait)	75 (1%)	50 (1%)	109 (2%)

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