

Table S3. Primary data on productivity and its components in the Fabeae

Species	Life cycle	Fruits	Flowers	F/F ratio	Seeds	Ovules	S/O rate	Source (see References in the article)
<i>Lathyrus vernus</i> (L.) Bernh.	2	–	–	–	6.10	14.10	0.43	Original: 55.698209 N, 36.730426 E, 2012
		0.50	7.20	0.07	5.90	11.20	0.53	Original: same locality, 2019
		2.01	8.40	0.24	5.09	13.40	0.38	[29]
		–	–	–	6.33	13.62	0.46	[97]
		2.21 ± 1.57	6.89 ± 1.81	0.32 ± 0.23	–	–	–	Original: 54.726364 N, 37.159582 E, 2022
<i>L. pratensis</i> L.	2	3.60	9.80	0.36	2.00	11.50	0.17	Original: 55.701955 N, 36.727716 E, 2016
		–	–	–	5.50	9.30	0.59	Original: 55.688446 N, 37.278817 E, 2020
		–	–	0.31	–	–	–	[98]
		–	–	–	4.97	10.36	0.48	[97]
<i>L. sylvestris</i> L.	2	–	–	–	5.48	12.09	0.46	[97]
		–	–	–	2.65	12.90	0.21	[34]
		2.60	7.90	0.33	5.20	13.00	0.40	Original: 55.670208 N, 36.719394 E, 2019
		2.40 ± 1.67	11.30 ± 1.38	0.21 ± 0.15	4.90 ± 2.04	9.42 ± 0.70	0.55 ± 0.21	Original: 54.742255 N, 37.187023 E, 2020
<i>L. japonicus</i> subsp. <i>maritimus</i> (L.) P.W.Ball	2	4.00	7.10	0.57	6.10	9.60	0.63	Original: 55.327436 N, 20.995064 E, 2019
		–	–	–	6.41	9.31	0.69	[99]
<i>L. latifolius</i> L.	2	–	–	–	6.69	19.44	0.34	[34]
<i>L. gmelinii</i> Fritsch	2	–	–	–	1.50	15.00	0.10	[100]
<i>L. hasslerianus</i> Burkart	2	–	–	–	–	–	0.85	[101]
<i>L. miniatus</i> M. Bieb. ex Steven	2	–	–	–	5.65	9.52	0.60	J.A. Akopian, personal communication, observations in the living collection of Yerevan Botanical Garden, Armenia, 2022
<i>L. niger</i> (L.) Bernh.	2	1.91 ± 0.83	9.36 ± 0.81	0.20 ± 0.08	3.15	9.65	0.32	Original: Botanical garden of Lomonosov Moscow state university, Russia, 2022
<i>L. tuberosus</i> L.	2	2.58 ± 0.99	5.77 ± 0.73	0.44 ± 0.15	1.88 ± 2.40	11.64 ± 1.47	0.15 ± 0.08	Original: 55.6797408 N, 37.803646 E, 2022

		2.10 ± 1.48	5.74 ± 0.87	0.36 ± 0.21	2.05 ± 1.17	13.67 ± 0.71	0.15	Original: 43.234921 N, 76.909344 E, 2022
<i>L. odoratus</i> L.	1	–	–	–	3.40	12.10	0.28	[102]
<i>L. ochrus</i> (L.) DC.	1	1.00 ± 0.00	1.00 ± 0.00	1.00 ± 0.00	2.63 ± 0.92	3.83 ± 0.41	0.69 ± 0.21	Original: Origin unknown, reproduced on experimental plot at Zvenigorod biological station, Russia, 2022
<i>L. sativus</i> L.		–	1.00	–	2.43	3.30	0.74	[99]
	1	–	1.00	0.55	–	–	–	[103]
		–	1.00	–	1.74	–	–	[104]
<i>L. inconspicuus</i> L.	1	–	–	–	5.10	5.70	0.89	[105]
<i>L. hirsutus</i> L.	1	–	–	–	5.00	6.10	0.82	[106]
		–	–	0.90	5.5	6.50	–	[107]
<i>L. cassius</i> Boiss.	1	–	–	0.91	5.65	7.00	0.81	[106]
<i>L. chloranthus</i> Boiss.	1	–	–	0.58	–	9.00	–	[107]
<i>L. aphaca</i> L.	1	–	–	0.80	–	6.00	–	[107]
<i>L. nissolia</i> L.	1	1.00	1.00	1.00	5.00	8.80	0.57	[107, 108]
<i>L. cicera</i> L.		–	–	–	3.10	5.40	0.57	[107, 108]
	1	1.00 ± 0.00	1.00 ± 0.00	1.00 ± 0.00	3.36 ± 0.74	5.00 ± 0.41	0.67 ± 0.14	Original: Armenia (voucher: MW1010150), reproduced on experimental plot at Zvenigorod biological station, Russia, 2022
<i>L. tingitanus</i> L.	1	–	–	1.00	5.75	–	–	[109]
<i>P. sativum</i> L.	1	–	–	–	6.20	7.10	0.87	Original: line 'SGE' grown on experimental plot at Zvenigorod biological station, Russia, 2022
<i>P. sativum</i> subsp. <i>arvense</i> (L.) Asch. & Graebn.	1	1.05 ± 0.22	1.15 ± 0.37	0.98 ± 0.11	4.14 ± 1.46	5.41 ± 0.80	0.76 ± 0.25	Original: Armenia, reproduced at Zvenigorod biological station, 2022
<i>Vicia sylvatica</i> L.	2	3.94 ± 2.31	14.65 ± 0.92	0.28 ± 0.18	1.73 ± 0.24	4.41 ± 0.01	0.38 ± 0.02	Original: 55.695805 N, 36.723130 E, pooled data from 2017 and 2022
<i>V. benghalensis</i> L.	2	–	–	–	2.56	4.06	0.63	[110]
		–	–	0.22	–	–	–	[11]
<i>V. cracca</i> L.	2	5.15	34.89	0.15	2.1	6.40	0.33	[35]

		–	–	–	2.25	4.94	0.46	[110]
		–	–	–	–	–	0.84	[111]
		–	–	–	–	–	0.86	[112]
		–	–	–	2.28	5.24	0.44	[97]
		–	–	–	2.06	3.76	0.55	[113]
		–	–	0.10	–	–	–	[114]
<i>V. sepium</i> L.		–	–	–	5.10	12.70	0.40	[97]
		1.10	4.00	0.28	2.40	13.90	0.17	Original: 55.701067 N, 36.731024 E, 2019
	2	–	–	–	3.41 ±	11.79 ±	0.29 ±	Original: 55.688446 N, 37.278817 E, 2020
					1.92	1.37	0.17	
		2.09 ±	4.30 ±	0.49 ±	3.33 ±	11.78 ±	0.27 ±	Original: 54.739528 N, 37.183849 E, 2022
		1.22	0.48	0.28	1.06	1.04	0.12	
<i>V. alpestris</i> Steven	2	–	–	–	3.00	5.00	0.60	[49]
<i>V. tenuifolia</i> Roth	2	–	–	–	–	–	0.91	[111]
		8,55	22,65	0,37	–	–	–	[115]
<i>V. multicaulis</i> Ledeb.	2	–	–	0.63	–	–	0.33	[116]
<i>V. tsydenii</i> Malyshev	2	0.84	6.86	0.12	–	–	0.43	[117]
		0.53	7.03	0.08	1.60	–	–	[118]
<i>V. pisiformis</i> L.	2	1.00 ±	43.57 ±	0.02	3.33 ±	7.44 ±	0.45	Original: 54.742322 N, 37.185399 E, 2022
		1.41	10.97		0.58	0.88		
<i>V. unijuga</i> A.Br.	2	2.00 ±	9.93 ±	0.20	1.40 ±	5.60 ±	0.25 ±	Original: Botanical garden of
		1.63	3.59		0.63	0.63	0.12	Lomonosov Moscow state university,
								Russia, 2022
<i>V. pubescens</i> (DC.) Link	1	–	–	–	2.87	4.40	0.65	[110]
<i>V. parviflora</i> Cav.	1	–	–	–	3.5	3.92	0.89	[110]
<i>V. monantha</i> Retz.	1	–	–	0.24	–	–	–	[11]
<i>V. articulate</i> Hornem.	1	–	–	0.26	–	–	–	[11]
<i>V. disperma</i> DC.	1	–	–	–	1.97	2.17	0.91	[110]
		–	–	0.10	–	–	–	[11]
<i>V. michauxii</i> Spreng.	1	–	–	0.91	–	–	–	[11]
<i>V. tetrasperma</i> (L.) Schreb.	1	–	–	–	3.11 ±	4.18 ±	0.76 ±	Original: 54.748894 N, 37.190894 E, 2022
					0.90	0.59	0.22	

		1.10	1.10	1.00	3.60	4.20	0.86	Original: 55.703080 N, 36.731651 E, 2019
<i>V. lutea</i> L.	1	–	–	–	2.81	5.17	0.54	[110]
		–	–	0.63	–	–	–	[11]
<i>V. lutea</i> subsp. <i>vestita</i> (Boiss.) Rouy	1	–	–	–	2.57	3.77	0.68	[110]
<i>V. hirsuta</i> (L.) Gray		–	–	–	1.75 ± 0.44	2.00 ± 0.00	0.87 ± 0.22	Original: 54.748894 N, 37.190894 E, 2022
	1	3.5	3.75	0.93	1.90	2.00	0.95	Original: 55.702092 N, 36.728335 E, 2019
		–	–	–	1.50	1.86	0.81	[110]
		–	–	0.60	–	–	–	[11]
<i>V. bithynica</i> (L.) L.	1	–	–	0.41	–	–	–	[11]
<i>V. anatolica</i> Turrill	1	–	–	0.42	–	–	–	[11]
<i>V. faba</i> L.		–	3.70	–	2.50	2.90	0.86	Original: cv. ‘Russkiye Chyornye’, grown on experimental plot at Zvenigorod biological station, Russia, 2020
	1	–	–	0.22	–	–	–	[103]
		–	–	–	3.18	4.00	0.79	[119]
		–	–	0.07	–	–	–	[103]
<i>V. narbonensis</i> L.	1	–	–	0.63	–	–	–	[11]
<i>V. vicioides</i> (Desf.) Cout.	1	–	–	–	1.70	2.03	0.84	[110]
<i>V. sativa</i> L.		1.10	1.20	0.94	6.40	10.00	0.64	Original: 55.507893 N, 31.088042 E, 2016
	1	0.71 ± 0.46	1.00 ± 0.00	0.71 ± 0.46	6.92 ± 2.02	8.75 ± 1.06	0.82 ± 0.19	Original: 54.743755 N, 37.190057 E, 2022
		–	–	–	5.25	6.80	0.75	[110]
<i>V. sativa</i> subsp. <i>nigra</i> (L.) Ehrh.	1	–	–	–	10.22	11.54	0.89	[110]
		–	–	0.32	–	–	–	[11]
<i>V. sativa</i> subsp. <i>cordata</i> (Hoppe) Asch. & Graebn.	1	–	–	0.72	–	–	–	[11]
<i>V. sativa</i> subsp. <i>macrocarpa</i> (Moris) Arcang.	1	–	–	0.54	–	–	–	[11]
<i>V. hybrida</i> L.	1	–	–	0.19	–	–	–	[11]

<i>V. villosa</i> Roth		–	–	0.11	5.30	8.15	0.65	[120]
	1	3.09 ± 1.20	10.60 ± 2.23	0.29	2.30 ± 1.00	5.63 ± 0.12	0.45 ± 0.20	Original: 54.924671 N, 36.889372 E, 2022
		–	–	–	2.79	–	–	[121]
<i>V. villosa</i> subsp. <i>varia</i> (Host) Corb.	1	–	–	–	2.55	4.10	0.62	[110]
		–	–	–	3.31	4.31	0.77	
<i>V. peregrina</i> L.		–	–	–	2.93	5.87	0.5	[110]
	1	1.00 ± 0.00	1.00 ± 0.00	1.00 ± 0.00	3.93 ± 1.14	5.17 ± 0.70	0.78 ± 0.18	Original: Armenia (voucher: ERE151319), reproduced on experimental plot at Zvenigorod biological station, Russia, 2022
				0.73				[11]
<i>V. ervilia</i> (L.) Willd.	1	1.13 ± 0.35	1.13 ± 0.35	1.00 ± 0.00	2.26 ± 0.87	3.15 ± 0.59	0.71 ± 0.26	Original: Origin unknown, reproduced on experimental plot at Zvenigorod biological station, Russia, 2022
<i>V. hyrcanica</i> Fisch. & C.A.Mey.	1	–	–	0.08	–	–	–	[11]
<i>V. pannonica</i> Crantz		–	–	–	4.32	–	–	[122]
	1	–	3.80 ± 0.41	–	–	–	–	Original: cv. 'Prima', grown at Rimski Šančevi experiment field of Institute of Field and Vegetable Crops, Novi Sad, Serbia, 2023
<i>V. pannonica</i> var. <i>purpurascens</i> Ser.	1	–	–	–	1.89	–	–	[122]
<i>V. grandiflora</i> Scop.	1	1.40 ± 0.50	2.00 ± 0.00	0.70 ± 0.25	10.53 ± 3.38	17.47 ± 1.55	0.59 ± 0.16	Original: 45.237520 N, 19.825829 E, 2023
<i>Lens culinaris</i> Medik.	1	1.90 ± 0.31	1.95 ± 0.22	0.98 ± 0.11	1.73 ± 0.51	2.05 ± 0.23	0.84 ± 0.23	Original: cv. 'Petrovskaya 4105', grown on experimental plot at Zvenigorod biological station, Russia, 2022

Note: 1 = annuals, 2 = perennials, dash = data absent. In the case of originally obtained data, these are represented as average ± standard deviation, where available.