

**Popelka et al., Preslia 91, 179-212, 2019.**

Electronic Appendix 1. Locality details and overview of data analyses done on *Ficaria* populations (\* = analysis was performed on plants from the respective locality; c = *F. calthifolia*, x = hybrid, v = *F. \*verna*), including taxon identity, locality code, elevation, habitat, GPS geographic coordinates and collector name(s). Localities from which *Ficaria* populations were analysed in previous paper (Popelka et al. 2019) were also added into Appendix and are identified in the last column by 'Popelka et al. 2019'. In the case of additional sampling from the same locality as Popelka et al. (2019) did, such locality is identified by 'Popelka et al. 2019 p.p.' in the last column. 'Taxa composition on site' represents number of individuals of each taxon (*Fc* = *F. calthifolia*, *Fc x Fvv* = hybrid, *Fvv* = *F. \*verna*) analysed by flow-cytometry at each locality. 'Coding in Popelka et al. 2019' identifies locality codes used by the Popelka et al. (2019).

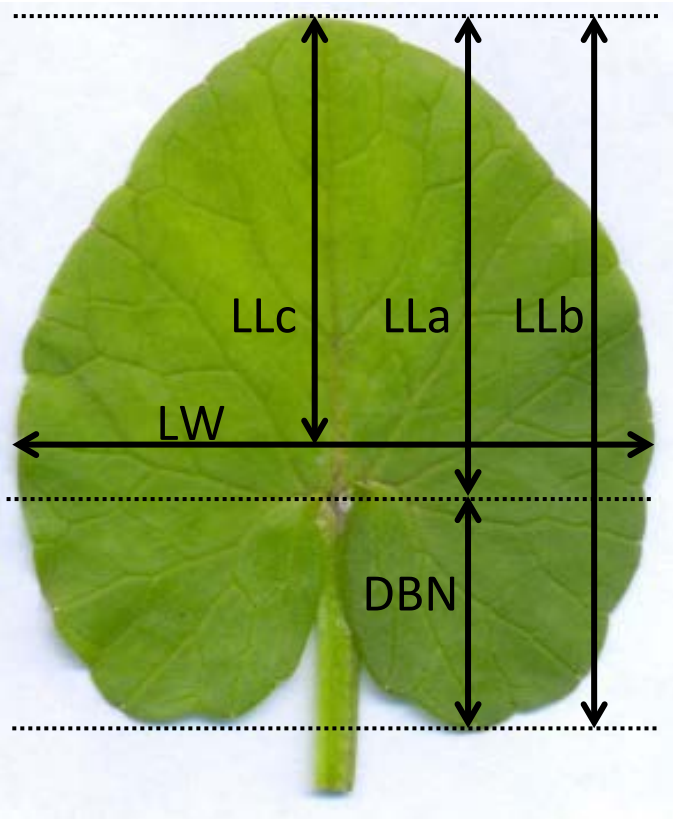
Locality code		Overview of analyses					Taxa composition at site (number of analysed)				Locality info						
No. of site	Coding in Popelka et al.	Morphometric analyses	Phenology	Pollen fertility and size	Sprouting of axillary bulbils	Niche differentiation	Total	Fc	Fc x		Country	Municipality	Elevation (m a. s. l.)	Habitat	GPS Coordinates (WGS-84)	Collector(s)	Source
									Fvv	Fvv							
1	PAV	*(c,x)		*(x,v)	*(x)		21	2	14	5	CZ	Pavlov	440	Thermophilous oak-hornbeam forest and forest fringe near the Děvičky castle	48°52'22.800"N, 16°39'23.600"E	Trávníček B.	Popelka et al. 2019 p.p.
2	RAK	*(x,v)	*(c,x,v)	*(c,x,v)			63	27	7	29	CZ	Rakvice	160	Levee top and banquet covered by scrub with Prunus spinosa	48°50'34.069"N, 16°49'14.859"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
3		*(c,x,v)	*(c,x,v)	*(c,x,v)			13	2	4	7	CZ	Vlčnov	260	Shrubs along the drainage canal from the village to the Vlčnovský háj forest	48°59'56.000"N, 17°35'38.000"E	Trávníček B., Duchoslav M.	This study
4							12	4	2	6	CZ	Kojetín	193	Alluvial forest and its margin at the bank of the Na hrázi fishpond in the northern part of the town	49°21'26.000"N, 17°18'14.000"E	Trávníček B.	This study
5	ZBR	*(c,x,v)	*(c,x,v)	*(c,x)	*(x)	*(c,x,v)	142	92	13	37	CZ	Zbraň	231	Wet to mesic grassland near the river of Cidlina	50°08'26.7"N 15°21'58.9"E	Trávníček B., Duchoslav M.	Popelka et al. 2019 p.p.
6	SAD	*(c,x,v)	*(c,x,v)	*(c,x)	*(v)		12	2	2	8	CZ	Sadská	211	Alluvial forest near the sandpit Sadská	50°9'34.000"N, 14°58'45.000"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
7					*(v)		30	0	2	28	CZ	Bohušovice n. O	152	Left bank of the Ohře river, ca. 20 m Ohře downstream from the bridge	50°29'36.000"N, 14°9'24.998"E	Trávníček B., Duchoslav M.	This study
8	CHO	*(x,v)		*(x,v)	*(x)		10	0	8	2	CZ	Chomutov	339	Town lawn at the Žižkovo square	50°27'38.596"N, 13°24'58.048"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
9	KAD	*(c,x)		*(c,x)			11	8	2	1	CZ	Kadaň	509	Sparse oak-hornbeam forest at the top of Úhošť hill	50°21'51.000"N, 13°14'40.000"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
10				*(c,v)	*(v)		25	1	0	24	CZ	Libočany	211	Along the road through the park at the vicinity of the Ohře river, N of the village	50°20'16.000"N, 13°30'44.000"E	Trávníček B., Duchoslav M.	This study
11	LEV	*(c)					5	4	0	1	CZ	Levonic	187	Deciduous grove of river bank	50°20'57.771"N, 13°40'27.807"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
12	BUD						3	0	0	3	CZ	Budenice	261	Deciduous scrub and forest fringe around the Svatý Isidor church	50°18'23.000"N, 14°5'43.000"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
13	BLE	*(c,x)		*(c,x,v)			11	1	6	4	CZ	Blevice	281	Fringe of oak-hornbeam forest	50°12'20.000"N, 14°14'26.000"E	Trávníček B., Duchoslav M.	Popelka et al. 2019
14	PLU	*(c,x,v)	*(c,x,v)	*(c,x,v)	*(x)		82	29	23	30	CZ	Plumlov	280	Mesic to wet grasslands and scrub with Prunus spinosa near the Kleštinek brook	49°27'16.021"N, 17°1'18.652"E	Trávníček B.	Popelka et al. 2019 p.p.
15	NAG	*(v)			*(v)		4	0	0	4	AT	Nagelberg near Gmünd	510	Town lawn	48°50'28.000"N, 14°59'46.000"E	Trávníček B.	Popelka et al. 2019 p.p.
16	HAV	*(c)		*(c)			14	12	2	0	CZ	Havraníky	300	Town lawn around the church	48°48'40.000"N, 16°0'30.000"E	Trávníček B.	Popelka et al. 2019
17	ZAJ			*(v)			3	0	0	3	CZ	Zaječí	210	Fringe of deciduous forest	48°52'24.000"N, 16°47'4.000"E	Trávníček B.	Popelka et al. 2019
18		*(v)					3	0	0	3	SK	Nová Bašta	289	Town lawn in the centre of village, 100 m S of the church	48°10'22.000"N, 19°56'29.000"E	Krahulec F.	This study
19							15	15	0	0	CZ	Slatinice	250	Town lawn around the church	49°33'39.571"N, 17°5'51.512"E	Duchoslav M.	This study
20				*(v)	*(v)		13	0	0	13	CZ	Slatinice	240	Moist places along the brook at the SW margin of the village	49°33'36.000"N, 17°5'43.000"E	Duchoslav M.	This study

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No. of site	Coding in Popelka et al.	Morphometric analyses	Phenology	Pollen fertility and size	Sprouting of axillary bulbils	Niche differentiation	Total	Fc	Fc x Fvv		Country	Municipality	Elevation (m a. s. l.)	Habitat	GPS Coordinates (WGS-84)	Collector(s)	Source
									Fc	Fvv							
21		*(v)		*(v)	*(v)		4	0	0	4	CZ	Prasek	250	Forest margin of the Chlum forest	50°14'9.000"N, 15°32'45.000"E	Šíková P.	This study
22	NOV	*(c)		*(c)			11	11	0	0	CZ	Nová Střenež	245	Margin of the Borek forest S of the crossroad from the village to the town of Nový Bydžov and the village of Lužec	50°13'54.000"N, 15°25'45.000"E	Šíková P.	This study
23	VIN	*(c)		*(c)			4	4	0	0	CZ	Vinary	268	Mesophilous grassland near the farm	50°17'13.000"N, 15°26'1.000"E	Šíková P.	Popelka et al. 2019
24				*(v)			8	0	0	8	CZ	Jaroměř	250	Ditch along the road to the town of Nové Město n. Met.	50°21'14.000"N, 15°56'23.000"E	Šíková P.	This study
25	DOM	*(v)			*(v)		37	0	0	37	CZ	Domanice	355	Mesic meadow	49°54'22.199"N, 16°3'23.567"E	Duchoslav M.	2019 p.p.
26	SAN			*(c,v)			3	3	0	0	CZ	Tvarožná	290	Semidry to mesic grasslands at the Santon hill	49°11'22.000"N, 16°45'56.000"E	Šíková P., Trávníček B.	Popelka et al. 2019
27	HOR	*(c)		*(c)			10	10	0	0	CZ	Milotice	225	Mesic to semidry grasslands and shrubs with Prunus spinosa in the Horky nature reserve	48°56'37.000"N, 17°8'5.000"E	Duchoslav M., Šíková P., Trávníček B.	Popelka et al. 2019
28	DOB	*(c,x,v)	*(c,x,v)	*(c,x,v)			76	26	26	24	CZ	Dobelice	256	Black locust forest along the road to Vémyslice	49°1'1.000"N, 16°16'19.000"E	Šíková P., Trávníček B.	Popelka et al. 2019
29	CHA			*(v)			3	0	0	3	CZ	Charvatská Nová Ves	180	Oak forest (Bořil les) near the village	48°45'34.000"N, 16°50'15.000"E	Šíková P., Trávníček B.	Popelka et al. 2019
30	LAD			*(v)			3	0	0	3	CZ	Ladná	155	Ditch along the road at the western margin of the village	48°48'19.000"N, 16°52'42.000"E	Trávníček B.	Popelka et al. 2019
31	AGF	*(c)					2	2	0	0	HU	Ágfalva	250	Mesic meadow between the village and Sopron	47°41'25.000"N, 16°31'15.000"E	Trávníček B.	Popelka et al. 2019
32		*(v)					4	0	0	4	HU	Kozseg	275	Shaded town lawn in the village	47°23'11.000"N, 16°32'47.000"E	Trávníček B.	This study
33							2	0	0	2	CZ	Staňechovice	250	Black locust forest above the village	49°32'10.000"N, 17°3'44.000"E	Duchoslav M.	This study
34							3	0	0	3	PL	Piotrowice Nyskie	220	Lawn in the park at the N margin of the village	50°24'46.000"N, 17°9'14.000"E	Trávníček B.	This study
35		*(v)					3	0	0	3	PL	Lewice	300	Moist meadow in the E part of the village	50°6'9.000"N, 17°47'43.000"E	Trávníček B.	This study
36		*(v)		*(v)			3	0	0	3	AT	Weissenbach	525	Lawn in centre of the village	48°54'43.000"N, 15°12'59.000"E	Trávníček B.	This study
37							4	0	0	4	PL	Rudzyszwałd	210	Lawn in centre of the village	49°56'27.000"N, 18°18'51.000"E	Trávníček B.	This study
38					*(v)		3	0	0	3	CZ	Plzeň	310	Lawn in the park of Smetanovy sady	49°44'44.000"N, 13°22'27.000"E	Šíková P.	This study
39							3	0	0	3	HU	Nadap	280	Wet ditch along the road near the village	47°15'51.000"N, 18°36'3.000"E	Trávníček B.	This study
40							2	0	0	2	HU	Hársakalja	295	Margin of the spruce forest near the village	47°33'2.000"N, 18°58'34.000"E	Trávníček B.	This study
41							4	0	0	4	HU	Sajkod	220	Moist margin of road near the Apáti-hegy spot	46°54'42.000"N, 17°51'19.000"E	Trávníček B.	This study

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									Fvv	Fvv							
42	SKA						3	3	0	0	CZ	Havraníky	300	Moist depression in dry grasslands above the village (Skalky place)	48°48'25.000"N, 16°0'28.000"E	Trávníček B.	Popelka et al. 2019
43							8	0	0	8	HU	Budapešť	105	Moist forest above the petrol station at the Húvösvölgyi street	47°32'7.000"N, 18°58'13.000"E	Trávníček B.	This study
44	NIT						3	3	0	0	SK	Nitra	500	Semidry grasslands and shrubs at the Kalvária hill	48°17'55.000"N, 18°5'28.000"E	Trávníček B.	Popelka et al. 2019 p.p.
45							3	0	0	3	SK	Vinosady	600	Shrubs near turistic path from the village to the Solčáre settlement	48°19'3.000"N, 17°16'57.000"E	Trávníček B.	This study
46							5	0	0	5	SK	Kozárovce	300	Wet meadows near the Mládežnický potok brook S of the village	48°18'33.000"N, 18°31'34.000"E	Trávníček B.	This study
47						*	260	163	37	60	SK	Svätý Jur	145	Lawns around the Pustý kostolík church S of the village	48°14'15.6"N, 17°12'10.8"E	Trávníček B.	This study
48							5	0	0	5	AT	Ranseredt	360	Forest and meadow between the road and the brook of Pramauer Bach, W from the village	48°22'19"N, 13°30'27"E	Trávníček B.	This study
49							18	18	0	0	CZ	Milá	414	Forest at the NE slope of the Milá hill near the village	50°26'08.9"N, 013°45'37.1"E	Popelka O.	This study
50	HLO						3	0	0	3	SK	Hlohovec	185	Mixed deciduous forest along the road to Klačany	48°23'48"N, 17°51'03"E	Trávníček B.	Popelka et al. 2019 p.p.
51							6	0	0	6	CZ	Libochovice	170	Ohře river bank near the town	50°24'17.152"N, 14°2'38.207"E	Fialová M.	This study
52							6	0	0	6	CZ	Valeč-Bělá	590	Road ditch at the N margin of the settlement	50°9'59.509"N, 13°13'49.082"E	Taraška V.	This study
53							7	0	0	7	CZ	Ústí nad Orlicí	350	Mixed forest at the Řehořův důl valley opening	49°57'59.192"N, 16°23'26.848"E	Konečná M.	This study
54							10	0	0	10	CZ	Ostrava	215	Komenského sady park, town lawn	49°51'1.571"N, 18°17'32.350"E	Taraška V.	This study
55							9	0	0	9	SK	Pezinok	230	Shrubs along the road Malacká cesta near the bus stop Rudné bane	48°19'11.5"N, 17°14'28.2"E	Duchoslav M.	This study
56							8	0	0	8	SK	Bratislava-Karlova ves	140	Alluvial forest along the side branch of the Danube river	48°8'46.5"N, 17°3'5.8"E	Duchoslav M.	This study
57							8	0	0	8	AT	Grub an der March	200	Shrubs with Ulmus minor and Cornus sanguinea along the road near the village	48°25'32.8"N, 16°50'18.4"E	Duchoslav M.	This study
58							9	9	0	0	AT	Pyhra	300	Field balk along the road at the outskirts of the village	48°35'34.5"N, 16°22'54.0"E	Duchoslav M.	This study
59							8	0	0	8	AT	Lobendorf	160	Grasslands at the slope above the brook near the road from the village to the village of Tresdorf	48°22'43.4"N, 16°20'07.1"E	Duchoslav M.	This study
60							9	9	0	0	AT	Guntersdorf	250	Lawns along the road in the centre of the village	48°38'56.0"N, 16°2'58.7"E	Duchoslav M.	This study
61	SAD						9	9	0	0	CZ	Sadská	180	Grasslands along the road near the Sadská water reservoir	50°9'25.350"N, 14°58'59.777"E	Popelka O.	This study

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									Fvv	Fvv							
62							8	0	0	8	CZ	Sázava	300	Wet bank of the Dojetřický potok brook	49°52'9.693"N, 14°53'42.797"E	Popelka O.	This study
63							5	0	0	5	CZ	Tvarožná	255	Forest margin and mesic grassland at the E foothill of the Santon hill W of the village	49°11'21.2"N 16°45'57.8"E	Duchoslav M.	This study
64							41	16	8	17	CZ	Nouzov	210	Forest margin near the Bílek pond N of the village	50°16'39.000"N, 15°14'38.000"E	Trávníček B.	This study
65							23	23	0	0	CZ	Kojetín	200	Town lawn in the centre of the town	49°20'54.710"N, 17°18'20.280"E	Duchoslav M.	This study
66							8	3	1	4	DE	Fichtenberg	100	Inclined bank of the field road between the village and the Elbe river	51°24'3.000"N, 13°14'55.300"E	Duchoslav M.	This study
67							5	0	0	5	SK	Choňkovce	230	Road ditch between the villages Choňkovce and Podhorod'	48°47'14.640"N, 22°14'56.460"E	Hroneš M., Kobrlová L.	This study

Electronic Appendix 2. Measured characters on ground leaf blade of *Ficaria* plants. For explanation of abbreviations see Table 2.



Electronic Appendix 3. Detailed enlargement of basal part of holotype specimen of *Ficaria x sellii* deposited in OL (No. 36802) and presented in Fig. 6.

