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SUPPLEMENTARY MATERIAL

Consequences of riparian forest invasions by alien plants for litter decomposition in small streams and ponds

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Key words: *Alnus glutinosa*; *Solidago canadensis*; *Fallopia japonica*; litter decomposition; headwater streams; ponds.

Tab. S1. Summary of characteristics of the studied streams and a pond used as a source for the mesocosm experiment. Mean values of water physicochemical characteristics are shown along with their standard deviations (in square brackets). Temperature (T) refers to the conditions during the experimental period.

											Substrate cover (%)							**Basin land cover** (%)						
Site	**Habitat type**	**Latitude** (°N)	**Longitude** (°E)	**Depth** (cm)	**Width/ area** (m/m^2)	**Cover** (%)	**T** (°C)	**Conductivity** (µS/cm)	**pH**	**O_2** (mg/L)	Megalithal	Macrolithal	Mesolithal	Microlithal	Akal	Sand and mud	Macrophytes	Broad leave forests	Mixed forests	Coniferous forests	Pastures	Grasslands/Shrubs	Green urban areas	Arable land
Vlkovský potok	Stream	48.54657	19.85186	15	2	80	3.1 [1.8]	125 [4]	7.9 [0.1]	11.7 [0.9]		40	30	30				35	35		15	10		5
Tuhársky potok	Stream	48.40236	19.53328	10	1.5	60	2.5 [2.0]	50 [11]	7.8 [0.1]	12.0 [1.2]		15	50	20	10	5		40	25		15	10	5	5
Madačský potok	Stream	48.41701	19.41664	30	2.5	100	1.8 [1.8]	96 [10]	7.7 [0.2]	12.1 [1.5]	10	20	20	20	5	5		30	35	15		20		
Hučava	Stream	48.65353	19.35492	15	1.5	80	2.4 [1.8]	111 [10]	8.0 [0.1]	12.1 [1.5]	5	10	40	30	10	5		40	35		25			
Starohutský potok	Stream	48.4403	19.34958	24	4.5	70	1.9 [1.7]	87 [11]	7.7 [0.2]	12.9 [1.3]	5	5	20	35	25	5		30	25			30	10	5
Rimavica	Stream	48.62067	19.76455	13	2.8	50	3.2 [1.6]	158 [16]	8.1 [0.2]	12.4 [1.0]	5	10	20	20	45			15	60	20	10			
Klenovecký potok	Stream	48.63173	19.83962	12	3	80	2.8 [1.7]	77 [8]	7.4 [0.2]	12.6 [1.4]		5	25	25	45			75	10			15		
Krupinica	Stream	48.43105	19.20015	16	3.5	80	2.8 [1.7]	85 [6]	7.8 [0.2]	12.7 [1.6]		5	25	20	50			25	25		10	35		5
Sekierský potok	Stream	48.52156	19.19124	16	5	70	2.0 [1.7]	65 [2]	7.7 [0.1]	13.1 [1.2]	5	20	15	10	50			80	10		5	5		
Breznický potok	Stream	48.6415	19.02796	20	5.5	50	1.3 [1.7]	80 [9]	7.8 [0.1]	13.2 [0.9]	10	40	20	20	10			70	30					
Červená studňa	Pond	48.46852	18.88356	90	1848	10	-	142 [5]	7.7 [0.5]	9.0 [2.1]						100	70		30			50		

Tab. S2. Summary characteristics of native (*A. glutinosa*) and invasive (*F. japonica, S. canadensis*) leaf litter species used in the experiments. Mean values are shown along with their standard deviations (in square brackets).

Leaf litter characteristics	*Alnus glutinosa*	*Fallopia japonica*	*Solidago canadensis*
Carbon (%)	47.1 [0.2]	43.2 [0.1]	42.1 [0.02]
Nitrogen (%)	3.0 [0.3]	1.9 [0.1]	1.7 [0.02]
Phosphorus (%)	0.1 [0.005]	0.1 [0.01]	0.2 [0.002]
C:N	18.3 [1.6]	27.1 [1.2]	28.4 [0.4]
C:P	905 [27]	898 [42]	452 [4]
N:P	19.2 [1.1]	12.9 [0.04]	6.2 [0.04]
Specific leaf area (mm^2/mg)	12.3 [0.6]	29.2 [6.4]	16.9 [2.3]