Appendix S1

Supporting information for the article:

Stable isotopes of saproxylic beetles reveal low differences among trophic guilds and suggest a high dependence on fungi

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Content of the Supporting information:

References

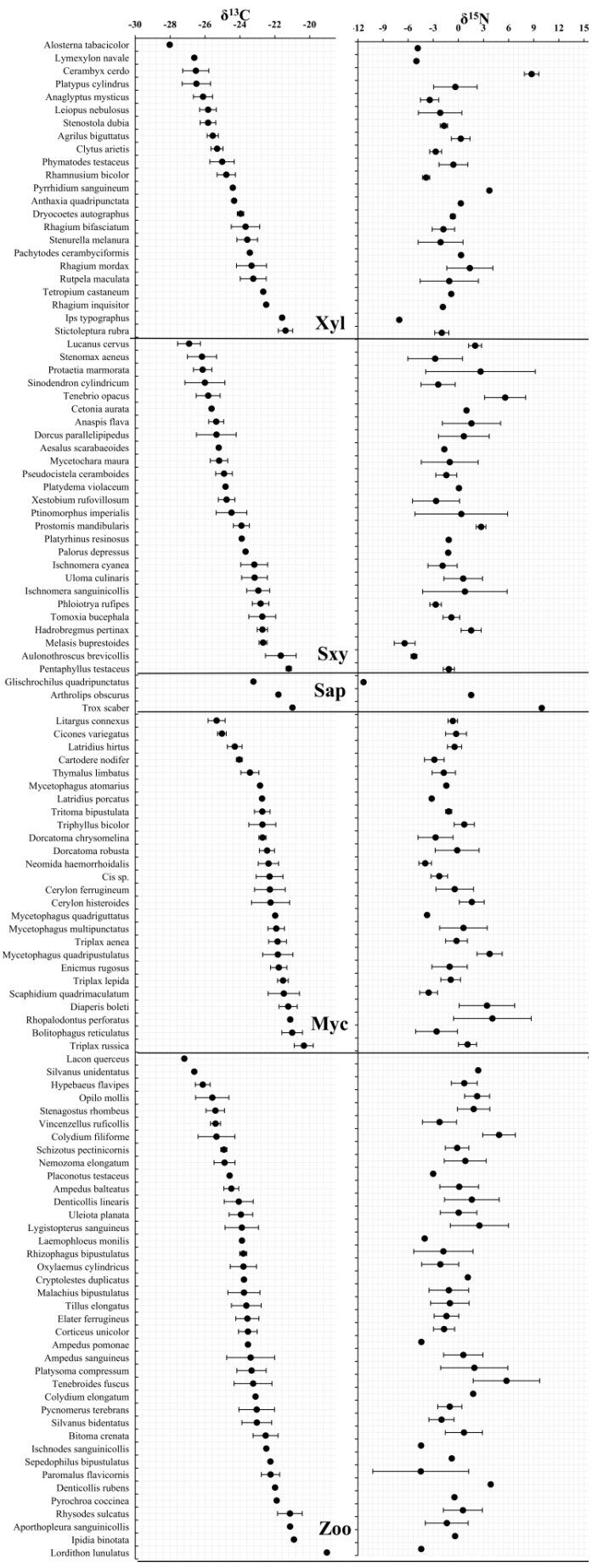

Figure S1. Mean values (and standard deviation) of $\delta^{13}C$ and $\delta^{15}N$ values for all sampled saproxylic beetles. Species are sorted based on the feeding guilds according to the Frisbee list (Bouget et al. 2019). Xyl = xylophages,

Sxy = saproxylophages,

Sap = saprophages,

Myc = xylomycetophages,

Zoo = zoophages.

Table S1. Summary statistics of the isotopic niche modelling. $\delta^{13}C$ mean and $\delta^{15}N$ mean signify centroid position of the bivariate standard ellipses representing core isotopic niches of saproxylic beetle trophic guilds, standard deviation follows (SD). SEA_B = Bayesian estimate of standard ellipse area computed using Bayesian inference, and lower and upper 95% confidence intervals of the estimate.

		$\delta^{13}C$ mean	**$\delta^{13}C$ SD**	**$\delta^{15}N$ mean**	**$\delta^{15}N$ SD**	**SEA_B**	**lower 95%CI**	**upper 95%CI**
Frisbee list	Myc	-22.0	1.2	-0.2	2.9	10.89	8.92	13.35
	Sxy	-24.3	1.6	-0.2	3.4	17.39	14.42	21.03
	Xyl	-24.2	1.9	-1.6	3.9	21.39	16.92	27.00
	Zoo	-23.5	1.4	0.2	3.5	15.31	13.20	17.81
Köhler list	X	-24.4	1.7	-0.8	4.1	21.2	17.9	25.2
	Z	-23.4	1.4	0.3	3.3	14.7	12.5	17.3
	M	-22.0	1.3	-0.1	3.0	11.9	9.5	15.1
	XM	-23.0	1.0	-0.9	2.5	7.9	6.0	10.8
	XZ	-24.1	1.4	1.5	2.9	11.9	7.1	21.4
	XS	-25.4	0.9	-0.1	3.8	10.3	7.1	16.0

Table S2. Differences in isotopic niche widths (SEA_B) and quantification of pairwise overlaps of trophic guild niches for both used classification lists (Frisbee list, Köhler list) based on posterior distributions of standard ellipses. The table shows estimated areas of each trophic guild (Area 1, Area 2) in the pairwise comparison (SEA_B pairwise test), the area of overlap, and shared niche space (in %). The posterior probability indicates whether the area of the first guild in the comparison is larger than the second one.

	SEA_B pairwise test	**Posterior probability of difference (%)**	**Area 1**	**Area 2**	**Overlap area**	**Shared niche space (%)**
Frisbee list	Myc < Sxy	100	11.09	17.65	1.52	6
	Myc < Xyl	100	11.09	21.80	1.92	6
	Myc < Zoo	100	11.09	15.46	4.35	20
	Sxy < Xyl	92	17.65	21.80	14.65	59
	Sxy > Zoo	86	17.65	15.46	10.65	47
	Xyl > Zoo	99	21.80	15.46	9.17	33
Köhler list	x > z	100	21.49	14.84	8.86	32
	x > m	100	21.49	12.22	1.30	4
	x > xm	100	21.49	8.30	5.17	21
	x > xz	95	21.49	13.75	9.15	35
	x > xs	100	21.49	11.29	8.44	35
	z > m	92	14.84	12.22	5.02	23
	z > xm	100	14.84	8.30	7.67	50
	z > xz	67	14.84	13.75	8.45	42
	z > xs	91	14.84	11.29	0.53	2
	m > xm	98	12.22	8.30	4.15	25
	m > xz	40	12.22	13.75	0.72	3
	m > xs	67	12.22	11.29	0.00	0
	xm < xz	94	8.30	13.75	2.89	15
	xm < xs	88	8.30	11.29	0.00	0
	xz > xs	70	13.75	11.29	3.42	16

References

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