

Article

Energetics of overwintering paper wasp gynes from differing climates (*Polistes dominula* and *Polistes gallicus*).

Helmut Kovac^{1*}, Helmut Käfer¹, Iacopo Petrocelli², Astrid B. Amstrup^{1,3}, Anton Stabentheiner^{1*}

¹ Institute of Biology, University of Graz, Universitätsplatz 2, 8010 Graz, Austria

² Dipartimento di Biologia, Università di Firenze, Via Madonna del Piano, 6 – 50019 Sesto Fiorentino, Italy

³ Department of Biology - Genetics, Ecology and Evolution, 8000 Aarhus C, Denmark

* Correspondence: helmut.kovac@uni-graz.at, anton.stabentheiner@uni-graz.at

Supplementary information

Table S1. Statistical details and the fit parameters of fit functions in Figure 3 of the individual and the mass specific standard metabolic rate ($SMR=y_0 + A \cdot \exp(R_0 \cdot T_a)$) of paper wasp gynes from Austria (*P. dominula* AT) and Italy (*P. dominula* IT, *P. gallicus* IT), data from Kovac et al. [32].

Individual metabolic rate

Species	Parameter			R ²	P	N
	y ₀	A	R ₀			
<i>P. dominula</i> AT	-0.55425	0.4633	0.09114	0.51872	<0.0001	929
<i>P. dominula</i> IT	-0.01822	0.06261	0.16594	0.78001	<0.0001	674
<i>P. gallicus</i> IT	-0.13431	0.1457	0.1082	0.70700	<0.0001	1019

Mass specific metabolic rate

Species	Parameter			R ²	P	N
	y ₀	A	R ₀			
<i>P. dominula</i> AT	-0.43032	0.35971	0.09114	0.51872	<0.0001	929
<i>P. dominula</i> IT	-0.01648	0.05661	0.16594	0.78001	<0.0001	674
<i>P. gallicus</i> IT	-0.18273	0.19824	0.10820	0.70700	<0.0001	1019