

Tab. 1: Morphometric data of workers of *Formica picea* and *F. candida* given as arithmetic mean  $\pm$  standard deviation [minimum, maximum]. Note the lower sample size in EYE / CS;  $p$  = error probability in 2-sided  $t$  test,  $df$  = degrees of freedom.

primary data of individuals				size-corrected nest sample means(for CS = 1.4 mm)			
	<i>F. picea</i> (n = 62)	$p$ for $df = 174$	<i>F. candida</i> (n = 116)		<i>F. picea</i> (n = 24)	$p$ for $df = 65$	<i>F. candida</i> (n = 43)
CS [ $\mu$ m]	1218 $\pm$ 95 [1034, 1458]	n.s.	1237 $\pm$ 131 [985, 1565]	CS [ $\mu$ m]	1219 $\pm$ 80 [1071, 1408]	n.s.	1241 $\pm$ 119 [1018, 1456]
CL / CW	1.142 $\pm$ 0.026 [1.096, 1.207]	0.0001	1.120 $\pm$ 0.025 [1.040, 1.181]	CL / CW <sub>1.4</sub>	1.123 $\pm$ 0.014 [1.100, 1.152]	0.0001	1.101 $\pm$ 0.017 [1.065, 1.143]
SL / CS	1.049 $\pm$ 0.022 [0.990, 1.105]	0.0001	1.029 $\pm$ 0.034 [0.944, 1.123]	SL / CS <sub>1.4</sub>	1.030 $\pm$ 0.015 [0.988, 1.047]	0.0001	1.011 $\pm$ 0.028 [0.950, 1.079]
PEW / CL	0.423 $\pm$ 0.024 [0.379, 0.476]	0.041	0.431 $\pm$ 0.025 [0.370, 0.496]	PEW / CL <sub>1.4</sub>	0.438 $\pm$ 0.016 [0.413, 0.473]	0.027	0.450 $\pm$ 0.021 [0.407, 0.496]
EYE / CS	0.283 $\pm$ 0.009 [0.263, 0.295]	n.s. ( $df = 26$ )	0.285 $\pm$ 0.010 [0.267, 0.298]	EYE / CS <sub>1.4</sub>	0.273 $\pm$ 0.006 [0.261, 0.283]	n.s. ( $df = 16$ )	0.277 $\pm$ 0.003 [0.275, 0.283]
GHL / CS [%]	12.06 $\pm$ 1.47 [8.7, 15.3]	0.0001	11.06 $\pm$ 1.53 [6.6, 14.0]	GHL / CS <sub>1.4</sub> [%]	12.18 $\pm$ 1.12 [10.67, 14.95]	0.0001	10.95 $\pm$ 1.40 [7.05, 13.63]
nOCC	0.29 $\pm$ 0.38 [0.0, 2.0]	n.s.	0.19 $\pm$ 0.37 [0.00, 1.00]	nOcc <sub>1.4</sub>	0.36 $\pm$ 0.43 [0.00, 2.00]	0.035	0.18 $\pm$ 0.25 [0.00, 1.00]
nGU	0.40 $\pm$ 0.43 [0.0, 1.5]	n.s.	0.28 $\pm$ 0.32 [0.0, 2.0]	nGu <sub>1.4</sub>	0.48 $\pm$ 0.34 [0.0, 1.20]	0.048	0.30 $\pm$ 0.33 [0.0, 1.17]
nPN	5.62 $\pm$ 2.77 [1.0, 12.0]	n.s.	4.59 $\pm$ 3.47 [0.0, 17.5]	nPn <sub>1.4</sub>	6.91 $\pm$ 2.18 [4.05, 11.95]	0.012	5.19 $\pm$ 2.83 [1.23, 12.57]
nMN	3.56 $\pm$ 1.85 [0.5, 8.0]	0.0001	2.33 $\pm$ 2.30 [0.0, 12.5]	nMn <sub>1.4</sub>	5.32 $\pm$ 1.21 [2.50, 7.83]	0.0001	2.87 $\pm$ 2.09 [0.0, 9.85]
nPR	0.14 $\pm$ 0.40 [0.0, 2.5]	n.s.	0.06 $\pm$ 0.24 [0.0, 2.0]	nPr <sub>1.4</sub>	0.22 $\pm$ 0.45 [0.0, 1.60]	n.s.	0.06 $\pm$ 0.17 [0.0, 0.90]
nPE	0.50 $\pm$ 0.76 [0.0, 2.7]	0.0001	0.06 $\pm$ 0.22 [0.0, 1.5]	nPe <sub>1.4</sub>	0.54 $\pm$ 0.69 [0.0, 2.40]	0.002	0.05 $\pm$ 0.18 [0.0, 0.83]
nHFFL	1.94 $\pm$ 0.90 [0.2, 4.0]	0.0001	1.28 $\pm$ 1.26 [0.0, 5.0]	nHFFL <sub>1.4</sub>	2.34 $\pm$ 0.61 [1.50, 4.10]	0.0001	1.37 $\pm$ 1.12 [0.0, 4.50]
sqPDG	8.62 $\pm$ 0.73 [6.80, 10.08]	0.0001	10.63 $\pm$ 1.66 [8.10, 17.20]	sqPDG <sub>1.4</sub>	8.92 $\pm$ 0.65 [8.00, 10.48]	0.0001	11.17 $\pm$ 1.57 [9.19, 15.56]
RipD	6.79 $\pm$ 0.60 [5.4, 8.0]	0.0001	7.69 $\pm$ 0.70 [5.8, 9.5]	RipD <sub>1.4</sub>	6.78 $\pm$ 0.44 [6.03, 7.77]	0.0001	7.72 $\pm$ 0.59 [6.20, 9.30]

lysis because two most discriminative and three less discriminative differential characters to the Central Asian sister species *F. candida* SMITH (see below) are placed on missing body parts. A subjective distinction from this species based upon the preserved body parts seems not possible according to present knowledge. However, heterospecificity is clearly indicated by the most different geographic distribution of *F. picea* and *F. candida*: all 26 morphometrically and another 9 genetically evaluated samples from France to West Siberia (GOROPASHNAYA 2003) belonged to *F. picea*. As a matter of fact it is most unlikely that *F. candida* could occur in Finland.

***Formica transcaucasica* NASSONOV, 1889 –  
a *Formica incertae sedis***

YARROW (1954) and COLLINGWOOD (1979) tried to solve the homonymy problem by proposing the name

*Formica transcaucasica* NASSONOV, 1889 for the Black Bog Ant without presenting conclusive arguments of how they identified Nasonov's taxon. Can it be identified at all? DLUSSKY (1967) casually mentioned to have investigated types of *F. transcaucasica* from the Zoological Museum Moscow without giving any description of their characters or their labelling. Repeated contacts of the present author with the former and present curators of the Moscow collection during the late 1990ies did not result in a discovery of real or alleged types of *F. transcaucasica* (Dlussky, pers. comm., Andropov, pers. comm.). Conclusions on the identity of this taxon can thus only be derived from the original description in which NASSONOV (1889) wrote: "... Found by Gorbatshev in the Caucasus near the town of Tiflis. Worker: Black with dark brownish mandibles, scape, articulations of legs, feet, and lower part of scale. Smooth, shin-