

Tab. 4: Morphometrical data of workers of the four *Tetramorium* morpho-species: mean value of indexes (\pm SD).

		HL/HW	HS	HW/FR	HS/FR	HS/SL	ML/MW	HS/ML	Pw/PPw	SPI	PPI
<i>hungaricum</i> n = 92	mean	1.04	636.66	2.64	2.68	1.34	1.73	0.91	0.80	1.52	0.39
	SD	0.02	26.94	0.08	0.08	0.07	0.06	0.02	0.03	0.17	0.02
	min	0.99	567.50	2.45	2.47	1.26	1.58	0.85	0.75	1.19	0.35
	max	1.09	705.00	2.89	2.93	1.45	1.96	0.98	0.86	2.17	0.43
<i>semilaeve</i> n = 28	mean	1.02	733.39	2.83	2.85	1.32	1.76	0.93	0.84	1.53	0.37
	SD	0.02	42.31	0.11	0.09	0.04	0.04	0.02	0.04	0.14	0.02
	min	0.99	660.00	2.58	2.64	1.28	1.69	0.88	0.74	1.30	0.33
	max	1.05	810.00	3.10	3.09	1.50	1.84	0.99	0.92	1.79	0.42
<i>caespitum</i> n = 92	mean	1.03	767.75	2.51	2.55	1.30	1.83	0.85	0.77	1.48	0.42
	SD	0.02	57.77	0.09	0.08	0.12	0.05	0.03	0.03	0.12	0.02
	min	0.98	640.00	2.22	2.23	1.22	1.64	0.78	0.72	1.19	0.39
	max	1.12	915.00	2.76	2.78	2.37	1.98	0.91	0.94	1.84	0.46
<i>ferox</i> n = 25	mean	1.03	656.90	2.57	2.61	1.34	1.76	0.89	0.78	1.25	0.39
	SD	0.01	73.06	0.07	0.08	0.03	0.14	0.04	0.03	0.17	0.02
	min	1.00	550.00	2.43	2.47	1.30	1.15	0.82	0.71	1.02	0.36
	max	1.05	762.50	2.73	2.77	1.43	1.89	0.95	0.83	1.59	0.44

the highest correlation coefficient with the first canonical variate: -0.46. On this basis *T. hungaricum* populations can be considered as insignificantly heterogeneous in morphometrical features.

T. hungaricum vs. *T. caespitum* morphospecies

Workers of *T. hungaricum* and *T. caespitum* are quite easy to distinguish from each other based on differences in sculpture. In *T. caespitum* entire head, including the lateral surface between the occiput and the posterior eye level is always striated (Fig. 8), while the dorsum of head in *T. hungaricum* is more or less smooth, or with very fine, longitudinal striae only. In lateral view the surface between the occiput and the posterior eye level is always smooth and shining (Fig. 3). Gynes and males of both species have similar diagnostic morphological characters. In the case of *T. hungaricum* gyne the katepisternum is smooth and shining at least in part (Fig. 5), while in *T. caespitum* the entire surface of katepisternum is covered always with dense, longitudinal striae. The male genitalia do not bear any reliable diagnostic characters. Separation of males of both species is feasible on the bases of number of teeth on the mandibular masticatory border. Petiole, postpetiole and stipes of *T. hungaricum* male are very similar to that of *T. caespitum*, without reliable diagnostic characters. Mandibles of the male of *T. hungaricum* bear 4 - 6

(mean 5.1, n = 11) teeth while those of the male of *T. caespitum* bear 4 - 7 (mean 5.95, n = 13) teeth.

The discriminant analysis separated efficiently workers of *T. hungaricum* from *T. caespitum* (Fig. 9). The best discriminators were PPw (0.96), ML (0.94), FR (0.93), HL (0.9) and HW (0.9) on the basis of the correlation coefficients, nevertheless, all the other parameters had coefficients higher than 0.75. The pairwise morphometrical comparison also resulted in significant differences between these species regarding most of the indexes (Tab. 2). The differences between the means (Tab. 4) showed that PPI could be used safely to separate these two species.

T. hungaricum vs. *T. semilaeve* morphospecies

Workers of *T. hungaricum* are easy to confuse with that of *T. semilaeve* based on sculpture. Entire head of workers of both species, including the lateral surface between the occiput and the posterior eye level, is more or less smooth, or with very fine longitudinal striae only. Metric characters and indexes give perfect discrimination between the two species. Frons of *T. semilaeve* workers is very narrow (HW / FR: 2.83), while in the case of *T. hungaricum* workers the frons is wider (HW / FR: 2.63). The head of *T. hungaricum* workers is slightly longer than broad (HI: 1.04), while in the examined eastern populations (Senj/Croatia, Varna/Bulgaria, Kykladen, Paros/Greece, Antalya/