Digital supplementary material to

WAGNER, H.C., ARTHOFER, W., SEIFERT, B., MUSTER, C., STEINER, F.M. & SCHLICK-STEINER, B.C. 2017: Light at the end of the tunnel: Integrative taxonomy delimits cryptic species in the *Tetramorium caespitum* complex (Hymenoptera: Formicidae). – Myrmecological News 25: 95-129.

Tab. S1: Overview of observed material comprises information to sampling localities, ecology, biology, genetics, and male genital morphology. The names of the taxa follow the newly inferred species limits. Haplotype (HT) and nuclear copies of mitochondrial DNA (NUMT) identities of each sequenced locus are stated. GenBank accession numbers for CO1 sequences are given. See separately uploaded .csv file.

Tab. S2: Results of Procrustes ANOVA from a pilot study of workers (mesosoma in lateral view, 16 specimens of each *Tetramorium alpestre* and *T.* sp. E (= *T. immigrans*), two images per specimen, digitized twice). df = degrees of freedom.

Effect	Sum of squares	Mean squares	df	F	P
Species	0.010354	7.39×10^{-4}	14	3.11	0.0001
Individual	0.099931	2.37×10^{-4}	420	11.37	< 0.0001
Imaging error	0.009378	2.09×10^{-5}	448	1.54	< 0.0001
Digitizing error	0.012199	1.36×10^{-5}	896		

Tab. S3: Results of Procrustes ANOVA from forewings of 148 gynes. df = degrees of freedom.

Effect	Sum of squares	Mean squares	df	F	P
Species	0.107086	1.34×10^{-3}	80	7.22	< 0.0001
Individual	0.419041	1.85×10^{-4}	2260	9.34	< 0.0001
Directional asymmetry	0.002115	1.06×10^{-4}	20	5.33	< 0.0001
Fluctuating asymmetry	0.046442	1.98×10^{-5}	2340	5.77	< 0.0001
Imaging error	0.008055	3.44×10^{-6}	2340		

Tab. S4: Ten AFLP clusters contained individuals belonging into 20 CO1 clades.

AFLP cluster	CO1 clade
alpestre	*alpestre*
alpestre	U3
caespitum	U1
caespitum	*caespitum*1
	*caespitum*2
caespitum	U2
caespitum	B1
	B2
caespitum	D_w1
	D_w2
indocile	indocile1
	indocile2
hungaricum	hungaricum1
	hungaricum2
hungaricum	U4
U5	U5
	I
J	J
D_e	D_e
*impurum*_e	*impurum*_e1
*impurum*_e	*impurum*_e2
*impurum*_e	*impurum*_e3
*impurum*_e	*impurum*_e4
	*impurum*_e5
	*impurum*_e6
	*impurum*_e7
	*impurum*_e8
*impurum*_w	*impurum*_w
*impurum*_w	H
E	E

Tab. S5: Samples investigated by amplified fragment-length polymorphism with values showing probabilities (BAPS) to belong to each of the species. See separately uploaded .csv file.

Tab. S6: Traditional morphometric and meristic raw data of all investigated workers. See separately uploaded .csv file.

Tab. S7: Geometric morphometric raw data of all investigated workers. See separately uploaded .csv file.

Tab. S8: Geometric morphometric raw data of all investigated gyne wings. See separately uploaded .csv file.

Tab. S9: Type material procotol. Taxon names, years, authors, and nations of types are given. Name-bearing types are either excluded following the argumentation of *Type material examined* (I) - (VI), lost, or investigated.

Taxon name	**Year**	**Author**	**Geographic origin**	**Excluded because**	**Investigated**
acutiseta	1921	SANTSCHI	Morocco	II g	
aegeum	1992	RADCHENKO	Caucasus	III c	
aequa	1971	BARONI URBANI	?	I	
alternans	1929	SANTSCHI	Morocco	III d	
amium	1912	FOREL	Taiwan	VI	
anatolicum	2007	CSŐSZ, RADCHENKO & SCHULZ	Turkey	III d	
annauensis	1931	KARAVAIEV	Transcaspia	II a, c	
annectens	1969	PISARSKI	China	III d	
arenarium	1918	SANTSCHI	Tunisia	II b	
argentirubrum	2004	DIETRICH	Jordan	II b	
armatum	1927	SANTSCHI	Transcaspia	II c	
arzi	1969	TOHMÉ	Lebanon	II a, c	
atlante	1970	CAGNIANT	Tunisia	III g	
banyulense	1983	BERNARD	France		yes
barabense	1925	RUZSKY	Russia	II a, c	
bariensis	1911	FOREL	Italy	III a	
barryi	1981	MATHEW	India	II d, VI	
beesoni	1934	MUKERJEE	India	VI	
belgaense	1902	FOREL	India	VI	
bellii	1902	FOREL	India	VI	
biroi	1937	RÖSZLER	Hungary	I	
biskrense	1904	FOREL	Algeria	II g	
brevicorne	1918	BONDROIT	Corsica	III a	
brevinodis	1927	KARAVAIEV	Turkestan	II h	
browni	2000	TIWARI	India	II d, VI	
bursakovi	1992	RADCHENKO	Kazakhstan	III c	
caespito-moravicum	1941	KRATOCHVÍL	Czech Republic	lost	
caespitum	1758	LINNAEUS	new: Sweden	IV	
caldarium	1857	ROGER	Poland	II d	
cardiocarenum	1994	XU & ZHENG	China	VI	
caspium	1948	ARNOL'DI	?	I	
chefketi	1911	FOREL	Turkey	III d	
chinensis	1928	SANTSCHI	China	I	
christiei	1902	FOREL	India	II c, VI	
coeleste	1927	SANTSCHI	China	I	

concaviceps	1984	BURSAKOV	Kazakhstan	II f	
confinis	1990	RADCHENKO & ARAKELIAN	Armenia	III c	
coonoorense	1902	FOREL	India	VI	
cordatum	1998	SHEELA & NARENDRAN	India	VI	
crepum	1988	WANG & WU	China	VI	
curtulum	1895	EMERY	Myanmar	VI	
cyclolobium	1994	XU & ZHENG	China	II f, VI	
cyprium	1934	SANTSCHI	Cyprus	I	
cyrenaicum	1927	MENOZZI	Libya	I	
davidi	1911	FOREL	Israel	II a	
debilis	1924	EMERY	Egypt	I	
decamerum	1902	FOREL	India	VI	
densopilosum	1990	RADCHENKO & ARAKELIAN	Armenia	III c	
denticulatum	1902	FOREL	India	VI	
depressiceps	1933	MENOZZI	Israel	II c	
depressum	1892	FOREL	Canary Islands	II c	
difficile	1977	BOLTON	Nepal	II a, d	
diomedeum	1908	EMERY	Italy	III c	
dunhuangense	2001	CHANG & HE	China	VI	
eidmanni	1941	MENOZZI	China	I, VI	
elisabethae	1904	FOREL	India	VI	
ernesti	1921	SANTSCHI	France	I	
exasperatum	1891	EMERY	Tunesia	II a	
exile	2007	CZÖSZ, RADSCHENKO & SCHULZ	Afghanistan	III d	
fergusoni	1902	FOREL	India	VI	
ferox	1903	RUZSKY	Russia	III c	
feroxoide	1985	DLUSSKY & ZABELIN	Kazakhstan	III c	
fezzanense	1948	BERNARD	Algeria	II f	
flavidulum	1909	EMERY	Turkey	II a	
flavum	2001	CHANG & HE	China	VI	
formosae	1912	FOREL	Taiwan	VI	
forte	1904	FOREL	France	III b	
fusca	1825	LEACH	France	I	
fusciclavum	1952	CONSANI & ZANGHERI	Italy		yes
fuscula	1846	NYLANDER	Finland	V	
fortunatarum	1981	BARQUÍN	Canary Island	I	
gaetulum	1936	SANTSCHI	Morocco	I	
galaticum	1936	MENOZZI	Turkey	I	
geei	1927	WHEELER	China	I	
goniommoide	1979	POLDI	Turkey		yes
gregori	1944	KRATOCHVÍL, NOVAK & SNOFLAK	Czech Republic		yes
guancha	1929	SANTSCHI	Canary Islands	II a	
guangxiense	1997	ZHOU & ZHENG	China	VI	
haltrichi	1936	RÖSZLER	Hungary	I	

hammi	1915	DONISTHORPE	Great Britain	V	
himalayanum	1914	VIEHMEYER	India	VI	
hippocratis	1987	AGOSTI & COLLINGWOOD	Turkey		yes
hispanicum	1918	BONDROIT	Spain	III b	
hoggarense	1929	SANTSCHI	Algeria	II a	
hortensis	1948	BERNARD	Libya	II a	
hungaricum	1935	RÖSZLER	Hungary	IV	
immigrans	1927	SANTSCHI	Chile		yes
impurum	1850	FOERSTER	Germany	IV	
indocile	1927	SANTSCHI	"Turkestan, Russe"	IV	
inerme	1877	MAYR	Kazakhstan	II a, c	
inglebyi	1902	FOREL	India	VI	
italicum	1932	MENOZZI	Italy	II c	
jacoti	1927	WHEELER	China	II c, VI	
japonicum	1936	RÖSZLER	Japan	II a, VI	
jarbas	1970	CAGNIANT	Tunisia	II a, c	
jiangxiense	1988	WANG & XIAO	China	VI	
jizane	1985	COLLINGWOOD	Saudi-Arabia	II f	
juba	1985	COLLINGWOOD	Algeria	II a, c	
judas	1916	WHEELER, W.M. & MANN	Israel	II c	
jugurtha	1934	MENOZZI	Tunesia	II c	
kabulistanicum	1967	PISARSKI	Afghanistan	II f, III f	
kahenae	1934	MENOZZI	Tunisia	II f, III d	
kanariense	1902	FOREL	India	VI	
karakalense	1985	DLUSSKY & ZABELIN	Turkmenia	III d	
keralense	1998	SHEELA & NARENDRAN	India	VI	
kisilkumense	1990	DLUSSKY	Turkmenistan	II a, c	
kollari	1853	MAYR	Austria	II a, c	
kosmalianicum	1948	ARNOL'DI	?	I	
kutteri	1927	SANTSCHI	Switzerland		yes
laevigatum	1948	ARNOL'DI	Caucasus	III c	
laevinode	1902	FOREL	India	VI	
laevior	1936	MENOZZI	Tunesia	III c	
ligatum	1927	SANTSCHI	Turkestan	I	
liparaeum	1927	SANTSCHI	Sicily	II c	
longispina	1912	KARAVAIEV	Transcaspia	I	
lucidulum	1933	MENOZZI	Syria	II a, c	
mai	1993	WANG M.	China	II f, VI	
malabarensis	1998	SHEELA & NARENDRAN	India	II f, VI	
marocanum	1994	DE HARO	Morocco	III b	
maurum	1918	SANTSCHI	Tunesia	II f	
meridionale	1870	EMERY	Italy	II e	
minutum	1942	DONISTHORPE	Egypt	II d	
mixtum	1902	FOREL	India	VI	
modesta	1850	FOERSTER	Germany	I	

moravicum	1941	KRATOCHVÍL	Czech Republic	II b, III d	
musculus	1902	FOREL	India	VI	
myops	1977	BOLTON	India	II f, VI	
nipponense	1928	WHEELER	Japan	VI	
nitidissimum	1967	PISARSKI	Transcaspia	II c	
nitidiusculum	1948	ARNOL'DI	?	I	
nursei	1903	BINGHAM	Pakistan	II c	
obesum	1887	ANDRÉ	India	VI	
ochrothorax	2001	CHANG & HE	China	VI	
orissana	1902	FOREL	India	VI	
oxyomma	1912	KARAVAIEV	Algeria		yes
pallidum	1934	STITZ	China	VI	
palmense	1927	WHEELER	Canary Island	I	
parvioculum	2009	GUILLEM & BENSUSAN	Gibraltar	II f	
pelagium	1995	POLDI	Italy		yes
penninum	1927	SANTSCHI	Switzerland	IV	
persignatum	1995	BOLTON	Palestine		yes
perspicax	1992	RADCHENKO	Turkey	III c	
petiolatum	1998	SHEELA & NARENDRAN	India	VI	
picta	1912	KARAVAIEV	Transcaspia	II a, c	
plana	1927	KARAVAIEV	Turkestan	II c	
pullum	1941	SANTSCHI	Japan	I	
punctatum	1927	SANTSCHI	Sicily	III a	
punicum	1861	SMITH	Israel	II a	
pyrenaeicum	1936	RÖSZLER	Andorra	I	
repletum	1988	WANG & XIAO	China	VI	
reticuligerum	1984	BURSAKOV	Kazakhstan	II f	
reticuliventre	1902	RUZSKY	Turkestan	II c	
rhenanum	1996	SCHULZ	Germany	III d	
rhodium	1915	EMERY	Greece	III d	
romana	1921	SANTSCHI	?	I	
rossi	1976	BOLTON	India	VI	
rufitarsis	1936	RÖSZLER	Andorra	I	
rugigaster	1977	BOLTON	India	II b, VI	
ruginode	1917	STITZ	Spain	III b	
sahlbergi	1936	FINZI	Egypt	II c	
salvatum	1902	FOREL	India	VI	
salwae	2001	MOHAMED et al.	Egypt	II c	
sanetrai	2007	SCHULZ & CSŐSZ	Italy	III d	
sarkissiani	1911	FOREL	Turkey	III d	
schmidti	1904	FOREL	Israel	II a	
schneideri	1898	EMERY	Kazakhstan	III f	
sculptum	1977	AKTAÇ	?	I	
semilaeve	1883	ANDRÉ	Mediterranean region	II c	
sentosum	1998	SHEELA & NARENDRAN	India	VI	

sexdens	1915	FOREL	Ireland	II d	
shensiense	1977	BOLTON	China	II d, f	
shirlae	2007	SHARAF	Saudi Arabia	II d, f	
siciliense	1927	SANTSCHI	Sicily	II c	
signatum	1933	MENOZZI	Israel	I	
silhavyi	1941	KRATOCHVÍL	Czech Republic	III d	
silvestrianum	1924	EMERY	Spain	III b	
simillimum	1851	SMITH	Great Britain	II d	
smithi	1879	MAYR	India	VI	
splendens	1902	RUZSKY	Caucasus	I	
staerckei	1944	KRATOCHVÍL	Hungary		yes
striabdomen	2001	CHANG & HE	China	II b, f	
striaticeps	1925	EMERY	Turkestan	I	
striatis	1936	RÖSZLER	Hungary	I	
striativentre	1877	MAYR	Kazakhstan	II b	
sulcinode	1927	SANTSCHI	Kazakhstan	III d	
syriacum	1924	EMERY	Syria	II a	
szaboi	1936	RÖSZLER	Hungary	I	
tanakai	1977	BOLTON	Japan	VI	
taueret	1995	BOLTON	Egypt		yes
taurocaucasicum	1968	ARNOL'DI	Ukraine	III d	
tenuicornis	1925	EMERY	Transcaspia		yes
tingitanum	1929	SANTSCHI	Morocco	III b	
transbaicalense	1936	RUZSKY	Turkestan	lost	
transversinodis	1946	ENZMANN	USA	II f	
tsushimae	1925	EMERY	Japan	IV	
turcomana	1921	SANTSCHI	Turkestan	III d	
typicum	1902	RUZSKY	Turkestan	lost	
undatium	2001	CHANG & HE	China	II f, VI	
urbanii	1977	BOLTON	Bhutan	II c, VI	
vernicosum	1992	RADCHENKO	Tajikistan	II a, f	
walshi	1890	FOREL	India	VI	
yanoi	1937	SANTSCHI	Japan	II f, VI	
yulongense	1994	XU & ZHENG	China	VI	
zahrae	1923	SANTSCHI	Morocco	II a	

Tab. S10: Morphometric and meristic arithmetic means of absolute values and indices ± standard deviation [lower extreme, upper extreme] of workers. *n* = number of nest means, *i* = number of individuals. Morphometric values given in µm, POTCos and MC1TG are meristic.

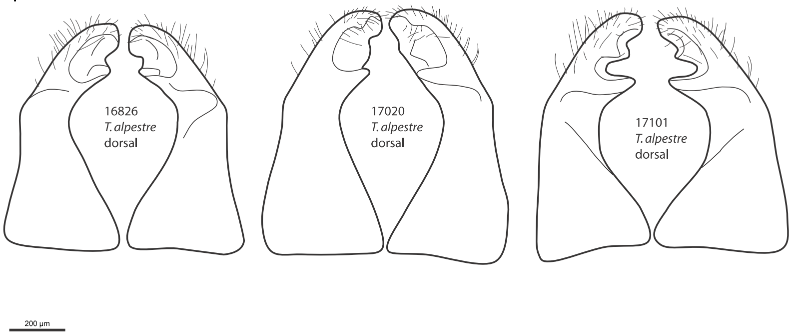
	alpestre	***caespitum***	***hungaricum***	***breviscapus***	***indocile***	***caucasicum***	***fusciclava***	***staerckei***	***impurum***	***immigrans***
	(n = 73,	(n = 145,	(n = 23,	(n = 3,	(n = 43,	(n = 10,	(n = 17,	(n = 41,	(n = 78,	(n = 40,
	i = 146)	i = 294)	i = 51)	i = 15)	i = 89)	i = 32)	i = 34)	i = 81)	i = 156)	i = 84)
CL	747 ± 50	766 ± 49	663 ± 34	715 ± 29	720 ± 50	766 ± 43	722 ± 40	757 ± 56	747 ± 46	839 ± 54
	[611; 857]	[597; 868]	[588; 731]	[685; 744]	[580; 829]	[711; 841]	[674; 823]	[668; 895]	[632; 896]	[725; 948]
CW	735 ± 52	757 ± 52	650 ± 34	713 ± 22	713 ± 54	747 ± 47	725 ± 45	734 ± 59	735 ± 50	830 ± 57
	[599; 844]	[585; 867]	[581; 713]	[693; 737]	[570; 814]	[688; 838]	[658; 835]	[642; 862]	[617; 885]	[701; 939]
dAN	209 ± 16	218 ± 17	181 ± 11	200 ± 10	207 ± 16	215 ± 14	204 ± 16	224 ± 18	204 ± 15	233 ± 15
	[170; 240]	[174; 255]	[159; 203]	[192; 211]	[172; 236]	[199; 240]	[185; 247]	[195; 266]	[167; 258]	[198; 266]
EL	144 ± 12	149 ± 11	139 ± 9	140 ± 5	142 ± 12	150 ± 11	158 ± 11	152 ± 13	142 ± 11	167 ± 12
	[120; 174]	[118; 176]	[123; 152]	[134; 145]	[116; 170]	[135; 173]	[140; 178]	[133; 181]	[122; 186]	[145; 192]
EW	108 ± 8	111 ± 8	102 ± 7	101 ± 3	107 ± 8	111 ± 8	115 ± 7	114 ± 9	106 ± 7	127 ± 9
	[92 ; 129]	[86; 133]	[87; 111]	[98; 104]	[87; 125]	[100; 127]	[104; 128]	[97; 136]	[93; 131]	[108; 145]
FL	288 ± 23	297 ± 23	245 ± 14	272 ± 9	277 ± 22	289 ± 20	284 ± 20	297 ± 27	283 ± 21	321 ± 23
	[230; 346]	[238; 352]	[218; 273]	[263; 282]	[225; 321]	[263; 325]	[258; 330]	[247; 359]	[236; 355]	[271; 363]
HFL	598 ± 54	626 ± 58	506 ± 30	555 ± 15	567 ± 55	606 ± 48	598 ± 45	614 ± 63	593 ± 51	693 ± 58
	[454; 709]	[432; 758]	[438; 567]	[539; 570]	[435; 673]	[557; 696]	[527; 691]	[517; 755]	[468; 751]	[578; 814]
MC1TG	14.12 ± 2.54	12.62 ± 2.31	14.91 ± 2.53	15.77 ± 1.20	14.01 ± 2.44	14.47 ± 1.81	20.57 ± 1.85	15.93 ± 2.35	15.25 ± 2.93	21.67 ± 2.68
	[7.03; 20.94]	[7.00; 19.58]	[9.64; 20.85]	[14.58; 16.97]	[6.41; 19.96]	[11.64; 17.33]	[16.34; 23.74]	[11.00; 22.00]	[6.70; 24.92]	[16.07; 27.00]
ML	870 ± 72	893 ± 73	725 ± 44	799 ± 38	828 ± 69	878 ± 60	823 ± 62	887 ± 83	849 ± 67	967 ± 76
	[677; 1017]	[672; 1047]	[642; 811]	[763; 839]	[640; 964]	[816; 987]	[747; 973]	[766; 1072]	[688; 1059]	[804; 1102]
MPPL	260 ± 20	268 ± 21	215 ± 13	239 ± 13	248 ± 21	261 ± 18	239 ± 16	267 ± 24	254 ± 20	287 ± 21
	[206; 314]	[206; 317]	[190; 238]	[226; 253]	[196; 295]	[241; 298]	[216; 275]	[225; 322]	[205; 308]	[242; 330]
MPSP	328 ± 29	330 ± 30	268 ± 18	315 ± 17	313 ± 28	326 ± 24	288 ± 22	323 ± 37	325 ± 28	352 ± 34
	[250; 406]	[230; 389]	[232; 295]	[301; 334]	[244; 371]	[297; 371]	[255; 335]	[267; 412]	[260; 390]	[284; 410]
MPST	195 ± 15	201 ± 17	166 ± 14	190 ± 8	188 ± 16	197 ± 14	187 ± 14	196 ± 18	194 ± 15	217 ± 18
	[156; 235]	[152; 234]	[142; 213]	[183; 199]	[149; 223]	[182; 222]	[171; 222]	[168; 238]	[159; 234]	[178; 250]
MtpW	371 ± 29	382 ± 31	311 ± 18	353 ± 18	350 ± 27	369 ± 29	342 ± 24	371 ± 35	364 ± 30	410 ± 34
	[302; 433]	[294; 445]	[272; 348]	[334; 370]	[278; 403]	[338; 420]	[309; 398]	[313; 475]	[297; 457]	[340; 474]
MW	477 ± 38	491 ± 41	413 ± 22	451 ± 16	457 ± 39	483 ± 36	446 ± 34	481 ± 46	468 ± 34	525 ± 42
	[382; 552]	[368; 575]	[369; 458]	[437; 468]	[350; 540]	[443; 546]	[403; 535]	[408; 581]	[384; 564]	[431; 607]
PEH	265 ± 20	263 ± 20	217 ± 12	247 ± 10	250 ± 19	262 ± 17	248 ± 17	262 ± 21	262 ± 18	284 ± 24
	[215; 310]	[209; 309]	[193; 239]	[237; 257]	[198; 289]	[238; 291]	[224; 283]	[229; 321]	[226; 306]	[232; 331]
PEL	176 ± 14	180 ± 15	143 ± 9	154 ± 8	168 ± 14	175 ± 13	159 ± 9	176 ± 15	172 ± 13	190 ± 11
	[143; 214]	[137; 213]	[124; 158]	[146; 162]	[130; 196]	[164; 198]	[147; 178]	[151; 209]	[142; 199]	[167; 212]
PEW	246 ± 21	244 ± 22	198 ± 16	239 ± 11	232 ± 22	244 ± 21	215 ± 16	244 ± 25	240 ± 20	268 ± 25
	[195; 297]	[191; 293]	[165; 227]	[227; 247]	[167; 279]	[213; 276]	[192; 247]	[202; 303]	[196; 300]	[213; 308]
PLSP	170 ± 16	168 ± 16	138 ± 10	173 ± 7	160 ± 16	163 ± 14	148 ± 9	161 ± 21	169 ± 15	178 ± 18
	[136; 199]	[120; 208]	[118; 153]	[167; 181]	[121; 189]	[146; 184]	[127; 166]	[128; 219]	[137; 203]	[148; 210]
PLST	191 ± 14	198 ± 17	161 ± 10	182 ± 11	184 ± 15	191 ± 16	183 ± 11	198 ± 19	189 ± 15	216 ± 18
	[157; 216]	[148; 238]	[141; 179]	[172; 195]	[138; 216]	[174; 220]	[166; 210]	[167; 239]	[156; 239]	[178; 249]
PoOc	293 ± 18	304 ± 19	262 ± 16	290 ± 18	281 ± 17	304 ± 15	274 ± 15	291 ± 20	298 ± 18	323 ± 20
	[246; 336]	[237; 339]	[238; 301]	[270; 305]	[231; 320]	[283; 328]	[256; 323]	[261; 347]	[257; 341]	[280; 359]

PnHL	187 ± 24	212 ± 21	164 ± 10	193 ± 20	182 ± 23	196 ± 19	198 ± 15	194 ± 19	188 ± 24	228 ± 16
	[123; 233]	[145; 252]	[142; 186]	[171; 208]	[139; 229]	[172; 222]	[165; 224]	[166; 241]	[117; 287]	[189; 259]
POTCos	8.11 ± 1.45	7.45 ± 1.92	2.14 ± 1.21	5.95 ± 0.53	6.08 ± 1.69	8.71 ± 1.44	6.76 ± 2.12	10.53 ± 1.75	8.80 ± 1.78	12.33 ± 1.67
	[4.50; 11.00]	[3.38; 12.13]	[0.13; 4.50]	[5.45; 6.50]	[2.63; 9.75]	[6.17; 10.63]	[4.63; 13.50]	[7.38; 13.75]	[5.00; 14.75]	[8.25; 16.13]
PPH	277 ± 21	276 ± 21	226 ± 12	264 ± 9	261 ± 21	275 ± 21	261 ± 20	280 ± 26	266 ± 19	299 ± 26
	[228; 327]	[221; 330]	[206; 246]	[253; 270]	[212; 301]	[248; 315]	[233; 302]	[240; 358]	[217; 312]	[243; 343]
PPL	120 ± 9	127 ± 11	96 ± 7	107 ± 5	112 ± 9	119 ± 10	112 ± 7	124 ± 11	119 ± 11	129 ± 9
	[95; 138]	[93; 152]	[81; 110]	[103; 113]	[92; 127]	[107; 144]	[101; 127]	[105; 150]	[91; 141]	[112; 154]
PPW	312 ± 25	315 ± 26	251 ± 17	302 ± 14	296 ± 24	305 ± 28	283 ± 23	312 ± 30	302 ± 24	337 ± 31
	[249; 375]	[247; 375]	[223; 286]	[287; 311]	[227; 343]	[269; 358]	[253; 333]	[267; 393]	[244; 355]	[270; 386]
Ppss	37.4 ± 14.5	39.9 ± 20.0	85.6 ± 36.1	73.6 ± 16.6	50.0 ± 23.8	45.0 ± 20.2	30.8 ± 10.5	16.9 ± 5.3	29.4 ± 14.2	30.5 ± 14.5
	[14.1; 92.3]	[13.3; 107.7]	[21.1; 169.5]	[57.9; 91.0]	[17.6; 110.5]	[16.4; 80.4]	[15.5; 47.3]	[11.3; 33.1]	[3.4; 79.5]	[13.6; 63.3]
PreOc	185 ± 14	187 ± 13	157 ± 9	173 ± 4	176 ± 14	185 ± 12	172 ± 11	184 ± 14	184 ± 15	209 ± 15
	[147; 218]	[145; 219]	[139; 171]	[168; 177]	[141; 204]	[168; 197]	[153; 198]	[155; 212]	[148; 228]	[165; 240]
RTI	297 ± 23	306 ± 23	258 ± 16	289 ± 8	287 ± 23	306 ± 21	302 ± 19	298 ± 25	292 ± 23	328 ± 23
	[244; 355]	[239; 361]	[226; 285]	[280; 297]	[226; 344]	[279; 343]	[271; 343]	[262; 350]	[225; 353]	[274; 377]
SLd	574 ± 43	592 ± 44	491 ± 26	520 ± 14	548 ± 42	589 ± 26	560 ± 33	587 ± 51	577 ± 40	655 ± 46
	[458; 661]	[439; 690]	[429; 538]	[510; 535]	[433; 643]	[554; 628]	[513; 646]	[498; 693]	[485; 704]	[566; 745]
SPST	150 ± 16	149 ± 16	121 ± 9	141 ± 10	143 ± 14	148 ± 12	124 ± 10	149 ± 21	150 ± 16	160 ± 20
	[109; 184]	[99; 185]	[101; 137]	[134; 152]	[107; 173]	[131; 171]	[108; 142]	[116; 199]	[117; 189]	[123; 198]
SPWI	224 ± 26	215 ± 23	173 ± 14	204 ± 14	202 ± 24	215 ± 21	171 ± 15	206 ± 32	216 ± 22	225 ± 29
	[161; 289]	[153; 280]	[149; 205]	[194; 219]	[146; 253]	[186; 254]	[148; 202]	[155; 277]	[167; 267]	[160; 279]
CS	741 ± 51	761 ± 50	657 ± 34	714 ± 26	717 ± 52	757 ± 44	724 ± 42	746 ± 57	741 ± 48	834 ± 56
	[605; 850]	[591; 867]	[584; 722]	[689; 740]	[575; 822]	[706; 839]	[667; 829]	[655; 878]	[624; 891]	[713; 943]
CL/CW	1.016 ± 0.014	1.012 ± 0.015	1.020 ± 0.014	1.002 ± 0.012	1.011 ± 0.014	1.027 ± 0.021	0.996 ± 0.012	1.032 ± 0.014	1.017 ± 0.017	1.012 ± 0.013
	[0.981; 1.049]	[0.969; 1.043]	[0.996; 1.051]	[0.989; 1.010]	[0.982; 1.051]	[0.987; 1.052]	[0.976; 1.029]	[1.003; 1.062]	[0.951; 1.049]	[0.985; 1.035]
dAN/CS	0.282 ± 0.007	0.286 ± 0.008	0.275 ± 0.011	0.280 ± 0.009	0.289 ± 0.008	0.283 ± 0.005	0.281 ± 0.007	0.300 ± 0.005	0.275 ± 0.008	0.280 ± 0.007
	[0.266; 0.297]	[0.259; 0.307]	[0.240; 0.289]	[0.269; 0.285]	[0.271; 0.306]	[0.278; 0.295]	[0.272; 0.297]	[0.288; 0.309]	[0.252; 0.294]	[0.267; 0.296]
EL/CS	0.195 ± 0.006	0.195 ± 0.007	0.211 ± 0.009	0.197 ± 0.012	0.198 ± 0.007	0.198 ± 0.006	0.218 ± 0.005	0.204 ± 0.006	0.192 ± 0.007	0.201 ± 0.005
	[0.181; 0.211]	[0.178; 0.217]	[0.192; 0.226]	[0.189; 0.210]	[0.182; 0.210]	[0.186; 0.206]	[0.211; 0.229]	[0.189; 0.219]	[0.177; 0.209]	[0.190; 0.214]
EW/CS	0.146 ± 0.004	0.146 ± 0.005	0.156 ± 0.006	0.142 ± 0.007	0.149 ± 0.004	0.147 ± 0.004	0.159 ± 0.003	0.153 ± 0.004	0.143 ± 0.005	0.152 ± 0.004
	[0.136; 0.157]	[0.134; 0.160]	[0.147; 0.167]	[0.137; 0.150]	[0.141; 0.157]	[0.139; 0.154]	[0.155; 0.166]	[0.144; 0.166]	[0.133; 0.154]	[0.145; 0.165]
EYE/CS	0.171 ± 0.005	0.171 ± 0.005	0.184 ± 0.007	0.169 ± 0.010	0.174 ± 0.005	0.172 ± 0.005	0.188 ± 0.004	0.178 ± 0.005	0.168 ± 0.005	0.176 ± 0.004
	[0.160; 0.182]	[0.158; 0.188]	[0.170; 0.194]	[0.163; 0.180]	[0.162; 0.181]	[0.162; 0.178]	[0.183; 0.196]	[0.168; 0.189]	[0.155; 0.181]	[0.167; 0.189]
FL/CS	0.388 ± 0.010	0.390 ± 0.010	0.373 ± 0.010	0.381 ± 0.001	0.386 ± 0.009	0.382 ± 0.008	0.392 ± 0.006	0.397 ± 0.008	0.382 ± 0.009	0.384 ± 0.006
	[0.359; 0.407]	[0.358; 0.412]	[0.341; 0.387]	[0.381; 0.382]	[0.368; 0.403]	[0.367; 0.398]	[0.382; 0.402]	[0.378; 0.417]	[0.360; 0.413]	[0.372; 0.398]
HFL/CS	0.806 ± 0.022	0.820 ± 0.026	0.770 ± 0.011	0.777 ± 0.007	0.791 ± 0.023	0.800 ± 0.022	0.826 ± 0.017	0.822 ± 0.023	0.800 ± 0.023	0.830 ± 0.019
	[0.745; 0.853]	[0.731; 0.881]	[0.750; 0.798]	[0.769; 0.782]	[0.751; 0.834]	[0.780; 0.854]	[0.784; 0.856]	[0.776; 0.883]	[0.749; 0.852]	[0.790; 0.863]
ML/CS	1.174 ± 0.025	1.172 ± 0.026	1.103 ± 0.018	1.119 ± 0.013	1.155 ± 0.020	1.160 ± 0.022	1.136 ± 0.021	1.188 ± 0.025	1.146 ± 0.025	1.158 ± 0.020
	[1.092; 1.225]	[1.104; 1.233]	[1.064; 1.146]	[1.107; 1.133]	[1.107; 1.205]	[1.131; 1.211]	[1.101; 1.175]	[1.141; 1.247]	[1.082; 1.200]	[1.109; 1.201]
MPPL/CS	0.351 ± 0.010	0.351 ± 0.010	0.327 ± 0.008	0.335 ± 0.007	0.346 ± 0.012	0.345 ± 0.014	0.330 ± 0.006	0.358 ± 0.009	0.343 ± 0.010	0.343 ± 0.007
	[0.331; 0.381]	[0.326; 0.371]	[0.309; 0.344]	[0.328; 0.341]	[0.321; 0.365]	[0.327; 0.369]	[0.319; 0.343]	[0.340; 0.378]	[0.321; 0.365]	[0.327; 0.358]
MPSP/CS	0.443 ± 0.015	0.433 ± 0.016	0.408 ± 0.015	0.441 ± 0.009	0.436 ± 0.016	0.431 ± 0.015	0.397 ± 0.013	0.432 ± 0.019	0.439 ± 0.015	0.421 ± 0.018
	[0.404; 0.478]	[0.389; 0.471]	[0.365; 0.434]	[0.435; 0.451]	[0.408; 0.464]	[0.405; 0.455]	[0.374; 0.424]	[0.387; 0.469]	[0.412; 0.480]	[0.382; 0.458]
MPST/CS	0.263 ± 0.007	0.263 ± 0.007	0.252 ± 0.020	0.266 ± 0.002	0.262 ± 0.007	0.260 ± 0.006	0.259 ± 0.005	0.263 ± 0.006	0.261 ± 0.006	0.260 ± 0.007
	[0.247; 0.279]	[0.248; 0.281]	[0.232; 0.335]	[0.264; 0.269]	[0.247; 0.277]	[0.253; 0.272]	[0.251; 0.268]	[0.249; 0.277]	[0.248; 0.278]	[0.243; 0.275]

MtpW/CS	0.500 ± 0.011	0.501 ± 0.013	0.473 ± 0.011	0.494 ± 0.008	0.488 ± 0.009	0.487 ± 0.015	0.471 ± 0.008	0.496 ± 0.014	0.491 ± 0.013	0.491 ± 0.012
	[0.469; 0.522]	[0.471; 0.532]	[0.445; 0.488]	[0.485; 0.500]	[0.464; 0.507]	[0.470; 0.515]	[0.462; 0.488]	[0.473; 0.553]	[0.461; 0.523]	[0.466; 0.523]
MW/CS	0.644 ± 0.012	0.645 ± 0.015	0.628 ± 0.008	0.631 ± 0.002	0.637 ± 0.011	0.637 ± 0.015	0.615 ± 0.012	0.645 ± 0.014	0.632 ± 0.011	0.629 ± 0.012
	[0.615; 0.674]	[0.605; 0.687]	[0.608; 0.645]	[0.629; 0.634]	[0.609; 0.667]	[0.612; 0.670]	[0.596; 0.646]	[0.614; 0.681]	[0.606; 0.654]	[0.605; 0.649]
PEH/CS	0.358 ± 0.009	0.345 ± 0.009	0.331 ± 0.009	0.346 ± 0.001	0.349 ± 0.008	0.347 ± 0.010	0.343 ± 0.007	0.352 ± 0.007	0.354 ± 0.010	0.340 ± 0.010
	[0.341; 0.381]	[0.320; 0.370]	[0.309; 0.344]	[0.344; 0.347]	[0.333; 0.367]	[0.336; 0.359]	[0.333; 0.355]	[0.340; 0.373]	[0.327; 0.379]	[0.321; 0.361]
PEL/CS	0.237 ± 0.008	0.237 ± 0.009	0.217 ± 0.006	0.216 ± 0.003	0.234 ± 0.007	0.231 ± 0.006	0.219 ± 0.005	0.236 ± 0.007	0.232 ± 0.008	0.228 ± 0.006
	[0.217; 0.257]	[0.216; 0.257]	[0.204; 0.226]	[0.212; 0.219]	[0.221; 0.251]	[0.221; 0.243]	[0.207; 0.227]	[0.219; 0.252]	[0.217; 0.250]	[0.213; 0.236]
PEW/CS	0.332 ± 0.012	0.321 ± 0.011	0.301 ± 0.013	0.335 ± 0.006	0.323 ± 0.012	0.322 ± 0.014	0.297 ± 0.009	0.326 ± 0.012	0.323 ± 0.011	0.321 ± 0.013
	[0.310; 0.359]	[0.295; 0.351]	[0.274; 0.322]	[0.329; 0.342]	[0.290; 0.350]	[0.295; 0.339]	[0.281; 0.315]	[0.298; 0.355]	[0.295; 0.350]	[0.293; 0.343]
PLST/CS	0.258 ± 0.009	0.260 ± 0.009	0.246 ± 0.007	0.255 ± 0.007	0.256 ± 0.007	0.252 ± 0.008	0.253 ± 0.006	0.265 ± 0.009	0.256 ± 0.007	0.259 ± 0.007
	[0.235; 0.281]	[0.232; 0.280]	[0.235; 0.262]	[0.250; 0.263]	[0.240; 0.269]	[0.241; 0.270]	[0.244; 0.261]	[0.245; 0.283]	[0.244; 0.274]	[0.247; 0.276]
PnHL/CS	0.252 ± 0.024	0.279 ± 0.020	0.249 ± 0.012	0.270 ± 0.027	0.254 ± 0.023	0.259 ± 0.020	0.274 ± 0.016	0.260 ± 0.017	0.254 ± 0.026	0.274 ± 0.014
	[0.177; 0.306]	[0.226; 0.323]	[0.230; 0.280]	[0.240; 0.290]	[0.203; 0.302]	[0.227; 0.292]	[0.228; 0.295]	[0.217; 0.289]	[0.162; 0.340]	[0.241; 0.304]
PLSP/CS	0.229 ± 0.013	0.220 ± 0.011	0.211 ± 0.009	0.243 ± 0.002	0.222 ± 0.011	0.215 ± 0.008	0.204 ± 0.008	0.215 ± 0.015	0.228 ± 0.011	0.214 ± 0.012
	[0.198; 0.265]	[0.188; 0.250]	[0.191; 0.231]	[0.241; 0.245]	[0.196; 0.246]	[0.202; 0.225]	[0.190; 0.222]	[0.186; 0.250]	[0.202; 0.254]	[0.193; 0.236]
PoOc/CS	0.396 ± 0.009	0.399 ± 0.009	0.399 ± 0.013	0.406 ± 0.013	0.392 ± 0.010	0.402 ± 0.011	0.379 ± 0.010	0.390 ± 0.008	0.403 ± 0.010	0.387 ± 0.006
	[0.376; 0.414]	[0.376; 0.422]	[0.382; 0.427]	[0.392; 0.415]	[0.374; 0.420]	[0.385; 0.420]	[0.364; 0.404]	[0.375; 0.408]	[0.371; 0.428]	[0.370; 0.397]
PPH/CS	0.374 ± 0.011	0.363 ± 0.011	0.344 ± 0.012	0.369 ± 0.009	0.364 ± 0.012	0.364 ± 0.014	0.360 ± 0.010	0.376 ± 0.012	0.359 ± 0.010	0.358 ± 0.011
	[0.354; 0.407]	[0.338; 0.402]	[0.312; 0.358]	[0.361; 0.379]	[0.328; 0.384]	[0.346; 0.387]	[0.344; 0.384]	[0.354; 0.417]	[0.337; 0.386]	[0.335; 0.382]
PPL/CS	0.162 ± 0.009	0.167 ± 0.009	0.145 ± 0.006	0.150 ± 0.002	0.157 ± 0.005	0.157 ± 0.009	0.155 ± 0.007	0.167 ± 0.008	0.161 ± 0.010	0.154 ± 0.008
	[0.141; 0.181]	[0.142; 0.190]	[0.138; 0.159]	[0.149; 0.152]	[0.147; 0.173]	[0.143; 0.176]	[0.144; 0.167]	[0.146; 0.182]	[0.141; 0.182]	[0.136; 0.171]
PPW/CS	0.422 ± 0.013	0.413 ± 0.013	0.382 ± 0.013	0.424 ± 0.011	0.413 ± 0.014	0.403 ± 0.022	0.391 ± 0.011	0.418 ± 0.012	0.408 ± 0.012	0.403 ± 0.013
	[0.395; 0.451]	[0.379; 0.452]	[0.355; 0.401]	[0.416; 0.436]	[0.388; 0.449]	[0.381; 0.439]	[0.371; 0.407]	[0.396; 0.449]	[0.381; 0.436]	[0.379; 0.428]
PreOc/CS	0.250 ± 0.006	0.245 ± 0.006	0.239 ± 0.006	0.243 ± 0.004	0.246 ± 0.007	0.245 ± 0.008	0.238 ± 0.005	0.246 ± 0.006	0.248 ± 0.008	0.250 ± 0.008
	[0.235; 0.264]	[0.230; 0.259]	[0.230; 0.249]	[0.238; 0.246]	[0.232; 0.266]	[0.235; 0.255]	[0.230; 0.246]	[0.232; 0.258]	[0.229; 0.266]	[0.231; 0.269]
RTI/CS	0.401 ± 0.011	0.401 ± 0.012	0.393 ± 0.015	0.405 ± 0.014	0.401 ± 0.011	0.404 ± 0.011	0.417 ± 0.010	0.399 ± 0.011	0.394 ± 0.012	0.393 ± 0.011
	[0.357; 0.422]	[0.365; 0.427]	[0.340; 0.412]	[0.394; 0.420]	[0.379; 0.429]	[0.387; 0.420]	[0.397; 0.432]	[0.377; 0.415]	[0.361; 0.421]	[0.368; 0.412]
SLd/CS	0.775 ± 0.014	0.777 ± 0.015	0.747 ± 0.015	0.728 ± 0.010	0.764 ± 0.013	0.779 ± 0.015	0.774 ± 0.006	0.787 ± 0.016	0.779 ± 0.015	0.784 ± 0.014
	[0.738; 0.802]	[0.724; 0.812]	[0.716; 0.773]	[0.722; 0.739]	[0.734; 0;790]	[0.749; 0.798]	[0.763; 0.784]	[0.750; 0.817]	[0.741; 0.820]	[0.755; 0.817]
SPST/CS	0.202 ± 0.012	0.195 ± 0.012	0.184 ± 0.010	0.197 ± 0.007	0.200 ± 0.011	0.196 ± 0.009	0.171 ± 0.008	0.199 ± 0.016	0.202 ± 0.012	0.191 ± 0.016
	[0.173; 0.228]	[0.161; 0.224]	[0.154; 0.203]	[0.191; 0.205]	[0.182; 0.223]	[0.183; 0.209]	[0.159; 0.188]	[0.164; 0.227]	[0.178; 0.234]	[0.162; 0.222]
SPWI/CS	0.302 ± 0.020	0.282 ± 0.017	0.263 ± 0.014	0.285 ± 0.010	0.281 ± 0.018	0.283 ± 0.017	0.237 ± 0.010	0.275 ± 0.024	0.292 ± 0.017	0.269 ± 0.020
	[0.256; 0.357]	[0.238; 0.339]	[0.226; 0.291]	[0.279; 0.296]	[0.253; 0.333]	[0.257; 0.311]	[0.217; 0.259]	[0.230; 0.322]	[0.257; 0.331]	[0.224; 0.307]

Fig. S1: Male genital morphology: 1: *T. alpestre*, dorsal; 2: *T. alpestre*, ventral; 3: *T. alpestre*, lateral; 4: *T. alpestre*, posterior; 5: *T. caespitum*, dorsal; 6: *T. caespitum*, ventral; 7: *T. caespitum*, lateral; 8: *T. caespitum*, posterior; 9: *T. hungaricum*, dorsal; 10: *T. hungaricum*, ventral; 11: *T. hungaricum*, lateral; 12: *T. hungaricum*, posterior; 13: *T. indocile*, dorsal; 14: *T. indocile*, ventral; 15: *T. indocile*, lateral; 16: *T. indocile*, posterior; 17: *T. caucasicum*, dorsal; 18: *T. caucasicum*, ventral; 19: *T. caucasicum*, lateral; 20: T. *caucasicum*, posterior; 21: *T. staerckei*, dorsal; 22: *T. staerckei*, ventral; 23: *T. staerckei*, lateral; 24: *T. staerckei*, posterior; 25: *T. impurum*, dorsal; 26: *T. impurum*, ventral; 27-29: *T. impurum*, lateral; 30, 31: *T. impurum*, posterior; 32: *T. immigrans*, dorsal; 33: *T. immigrans*, ventral; 34: *T. immigrans*, lateral; 35: *T. immigrans*, posterior.

1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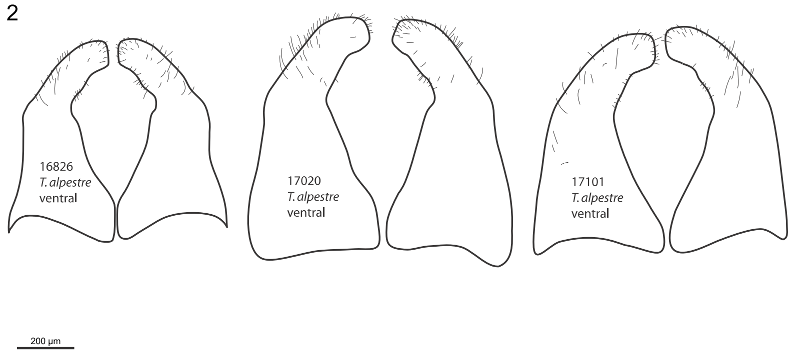
2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ventral
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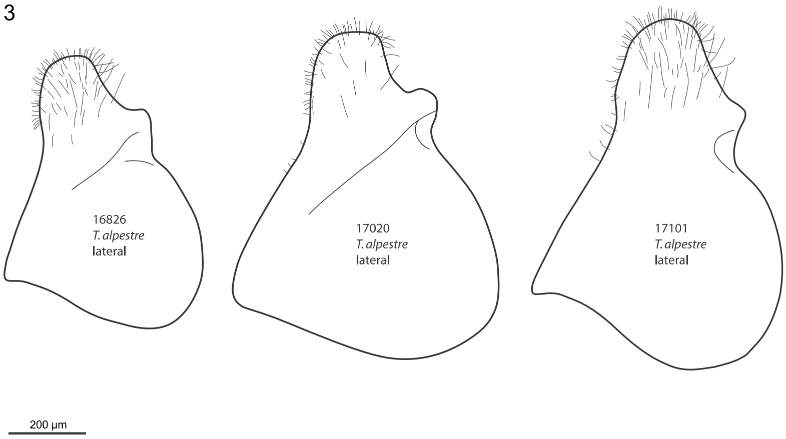
3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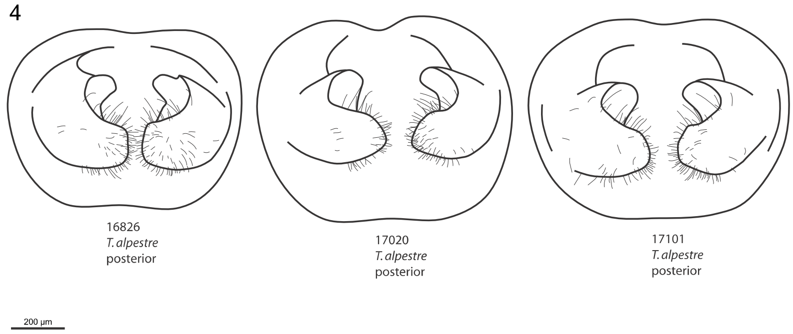
4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17020
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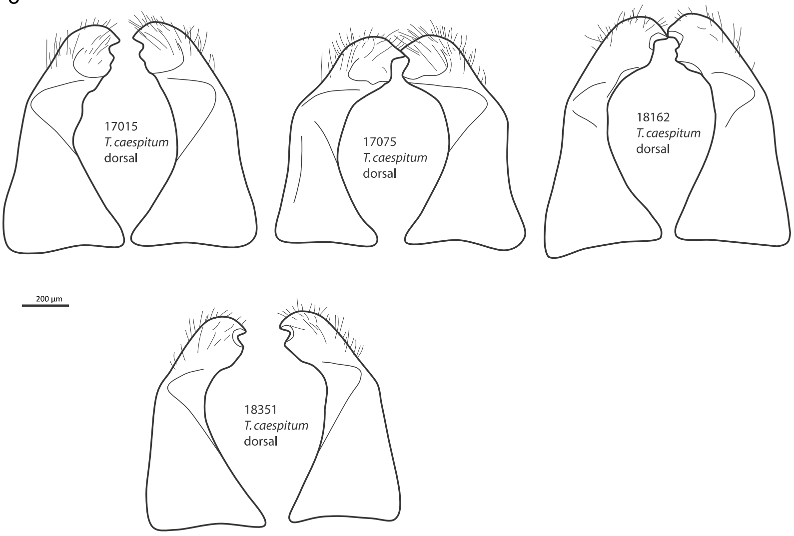
T. alpestre
posterior
200 µm

5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dorsal
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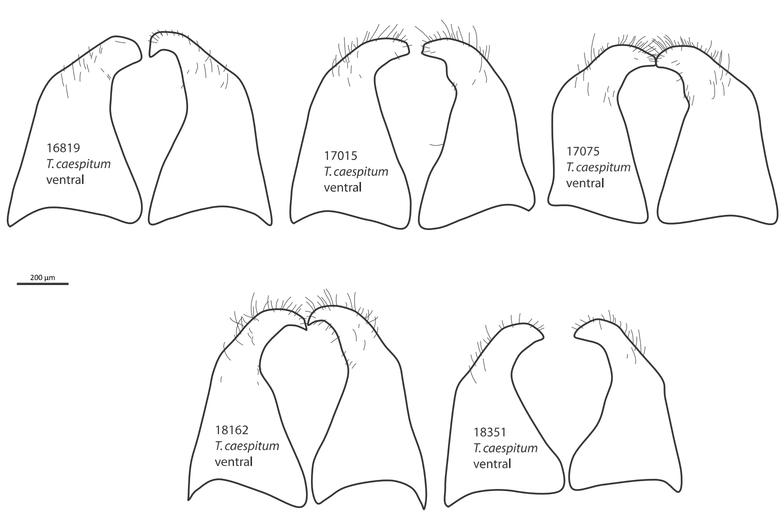
dorsal

6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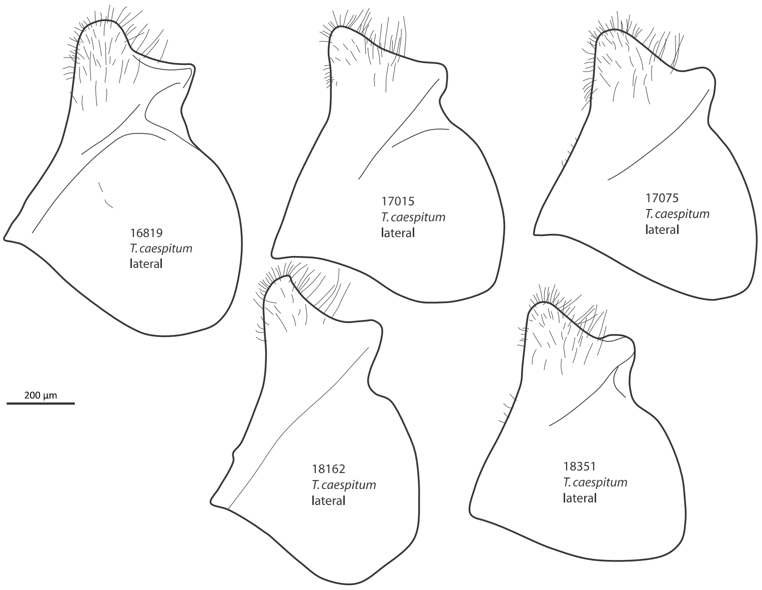
ventral

7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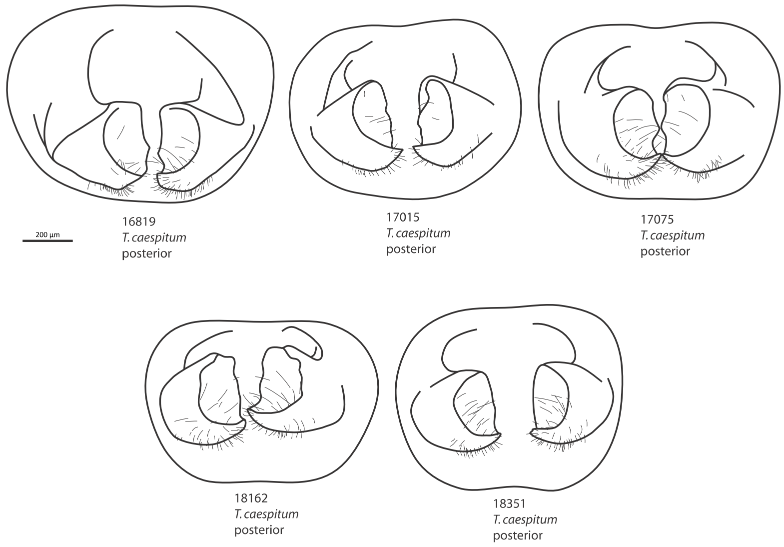
8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posterior
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T. caespitum
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posterior
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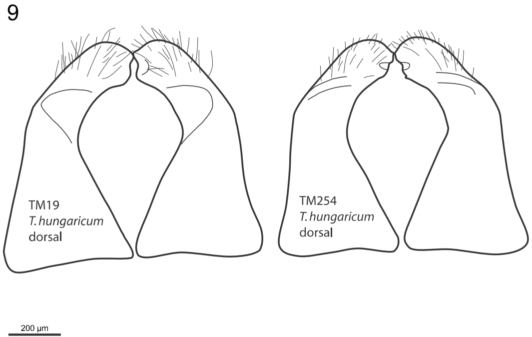
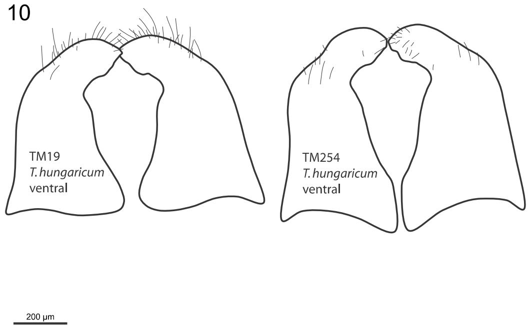
posterior
18351
T. caespitum
posterior

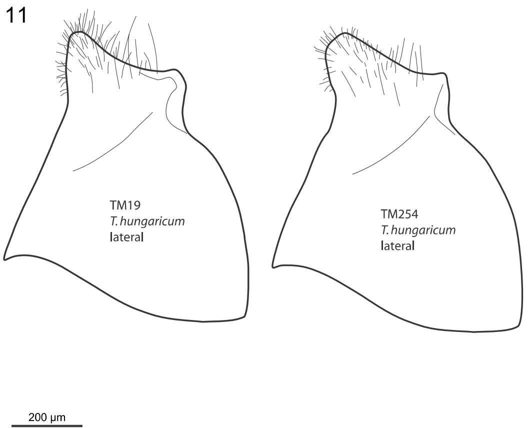
9


TM19
T. hungaricum
dorsal
TM254
T. hungaricum
dorsal
200 µm

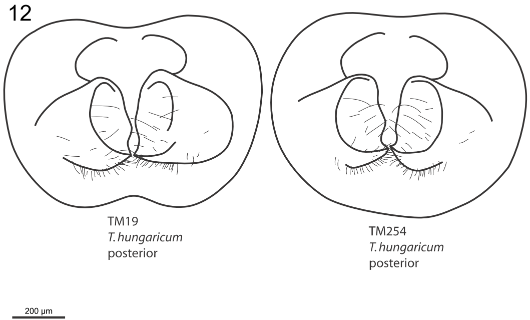
10


TM19
T. hungaricum
ventral
TM254
T. hungaricum
ventral
200 µm

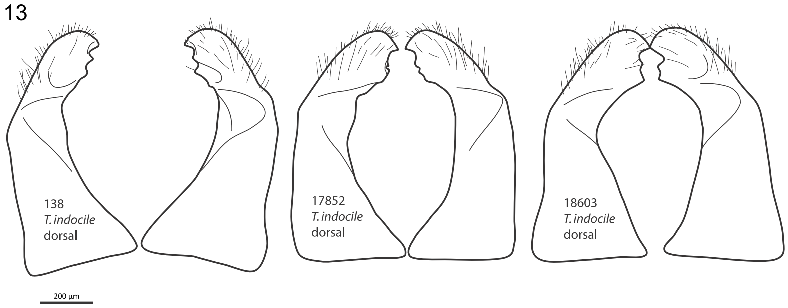
11


TM19
T. hungaricum
lateral
TM254
T. hungaricum
lateral
200 µm

12


TM19
T. hungaricum
posterior
TM254
T. hungaricum
posterior
200 µm

13



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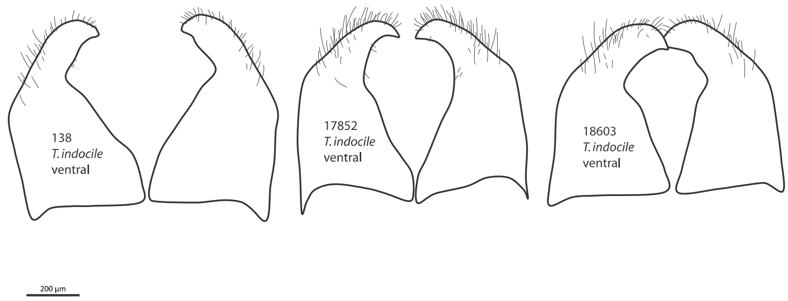
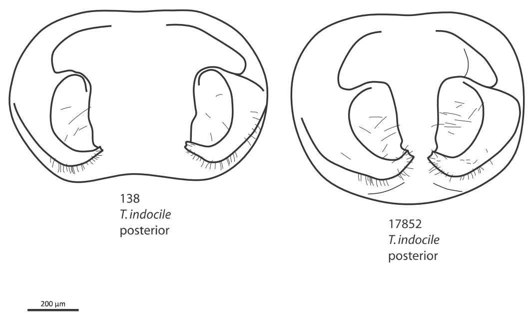


15

16



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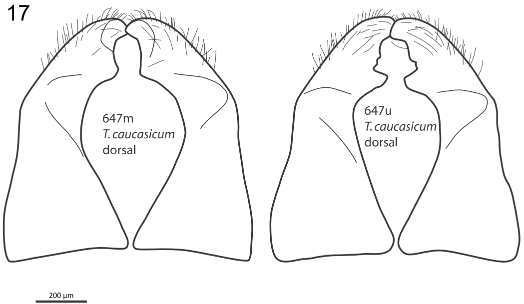

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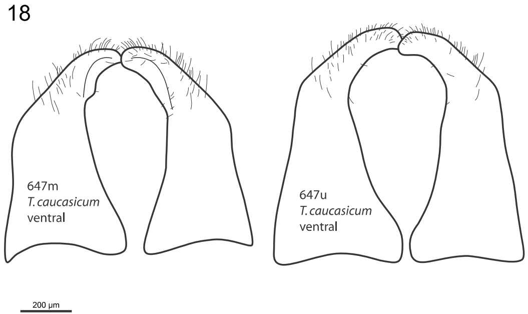
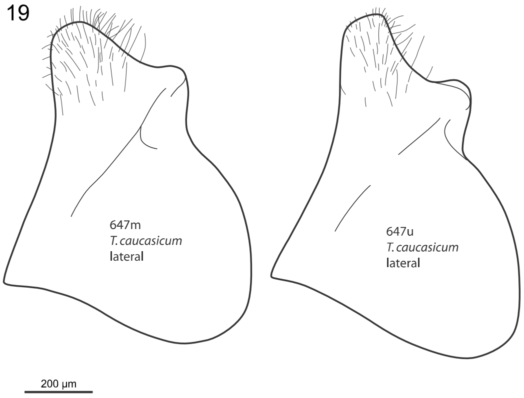


19



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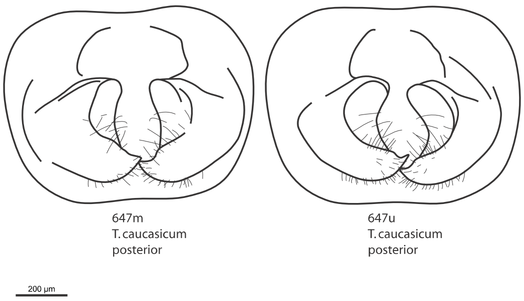

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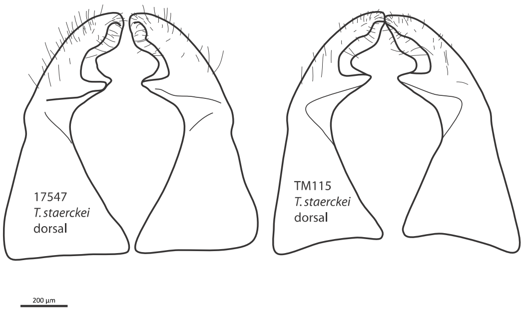

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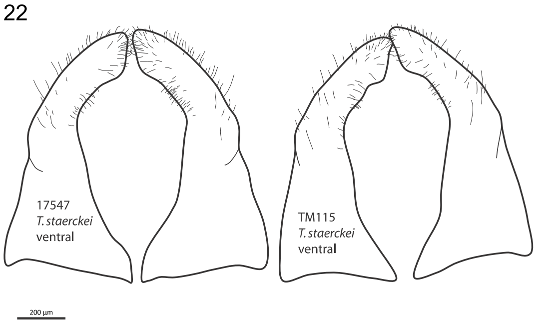

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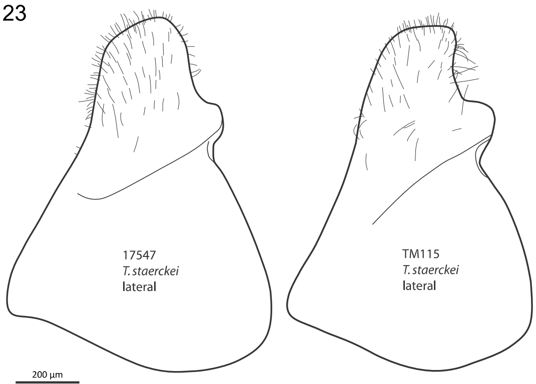

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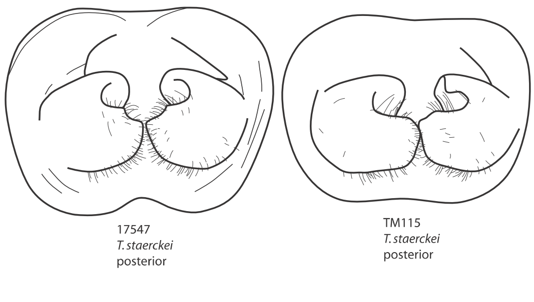
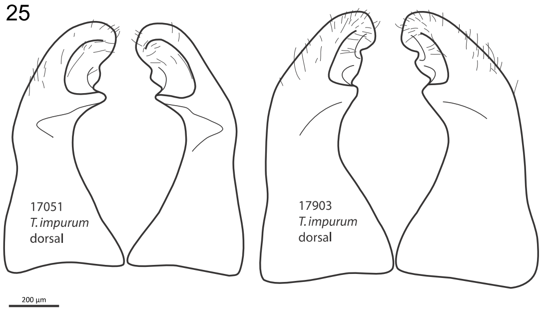


25



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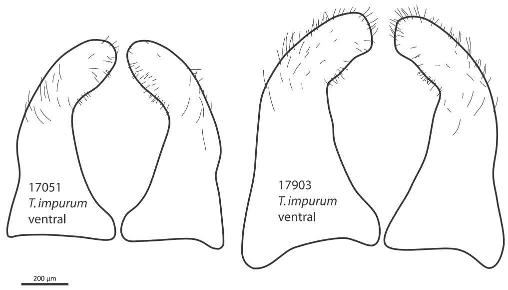

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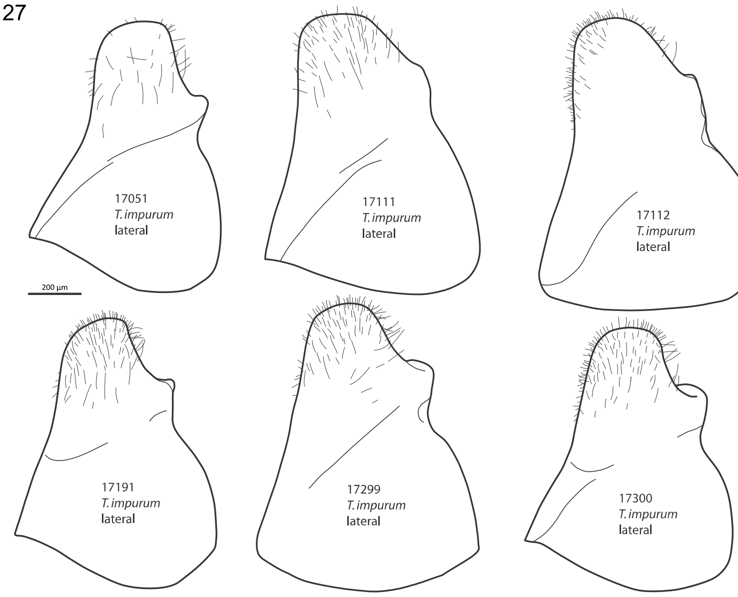
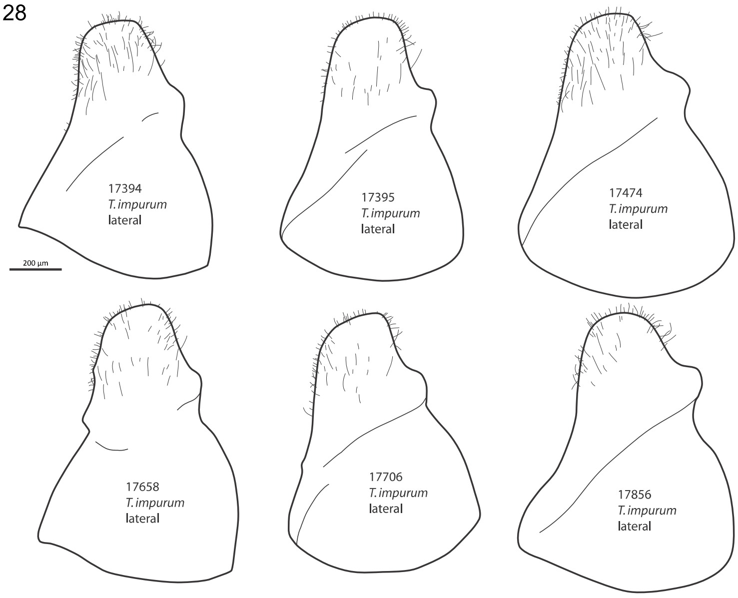
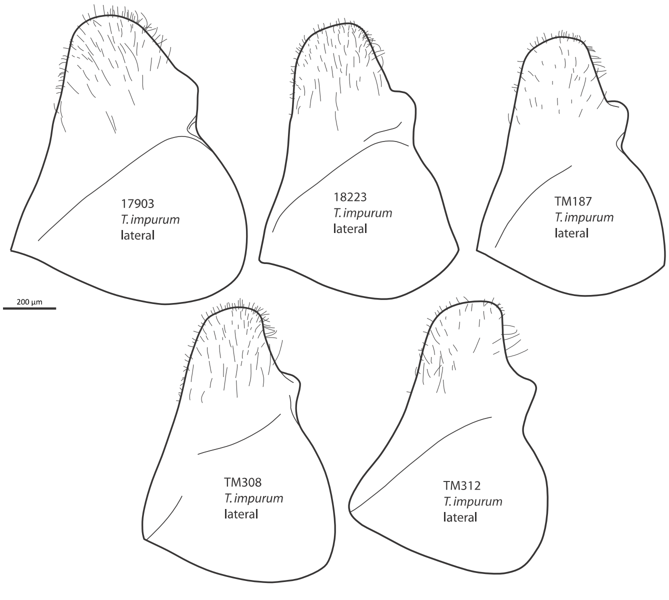


28



29



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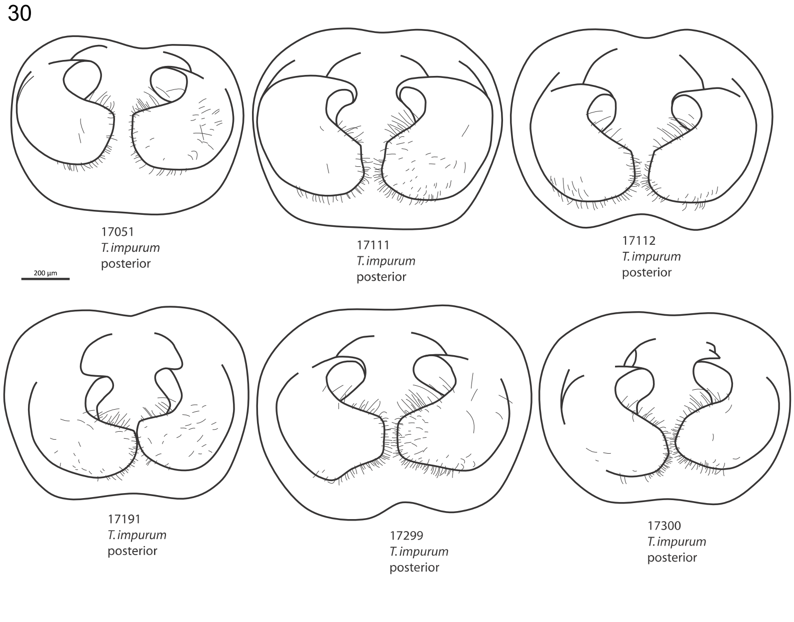
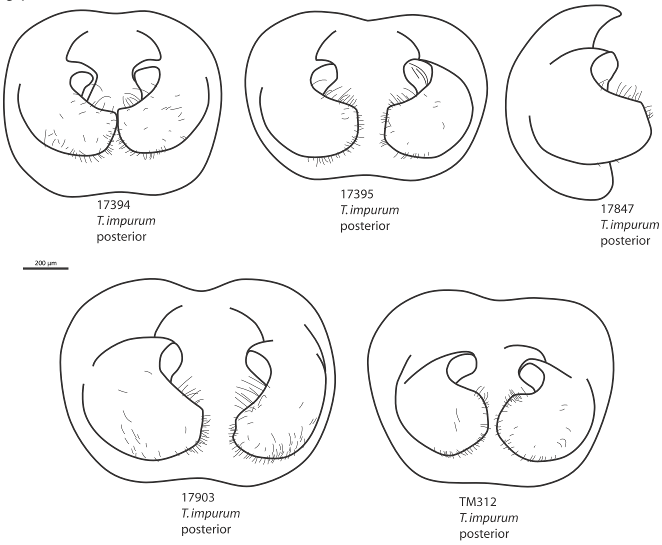
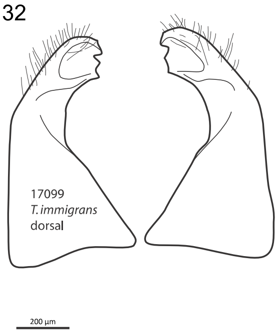


31



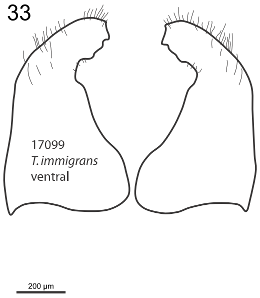
17394
T. impurum
posterior
17395
T. impurum
posterior
17847
T. impurum
posterior
200 µm
17903
T. impurum
posterior
TM312
T. impurum
posterior

32



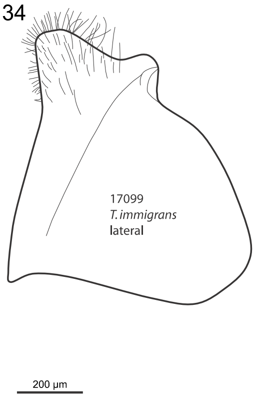
17099
T. immigrans
dorsal
200 µm

33



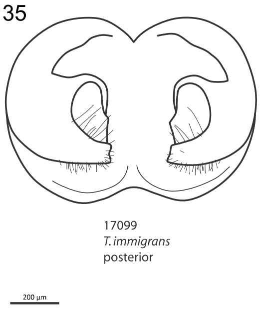
17099
T. immigrans
ventral
200 µm

34



17099
T. immigrans
lateral
200 µm

35



17099
T. immigrans
posterior
200 µm

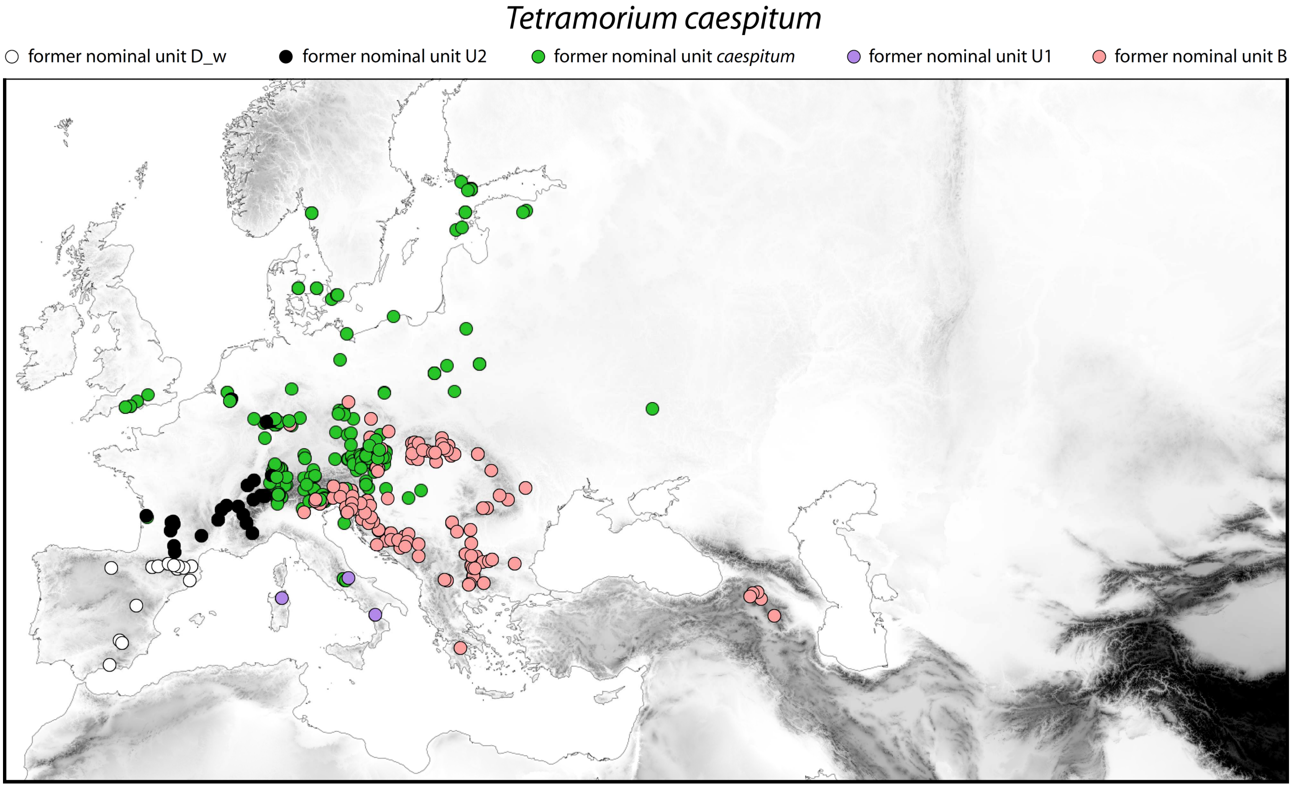


Fig. S2: Distribution of former entities D_w, U2, *caespitum*, U1, and B belonging to *Tetramorium caespitum*.

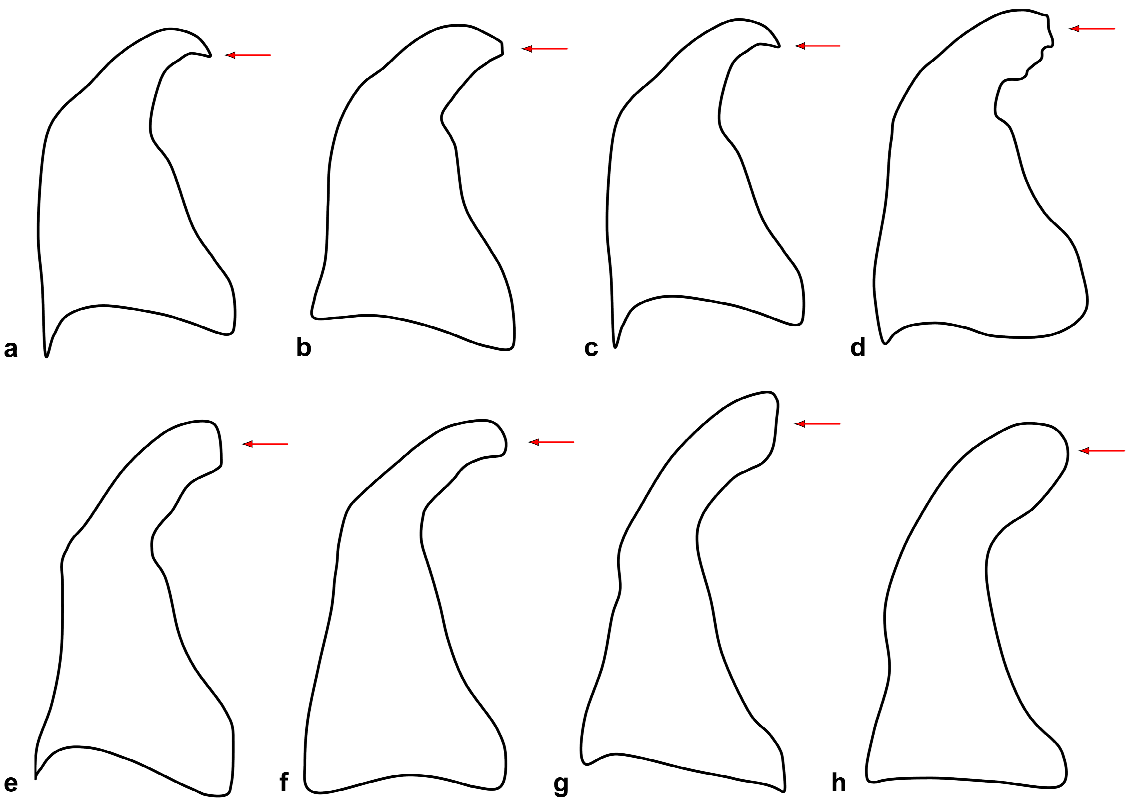


Fig. S3: Paramere structure in ventral view. (a) *Tetramorium caespitum*; (b) *T. hungaricum*; (c) *T. indocile*; (d) *T. immigrans* stat.n.; (e) *T. alpestre*; (f) *T. caucasicum* sp.n.; (g) *T. staerckei* sp.rev.; (h) *T. impurum*.

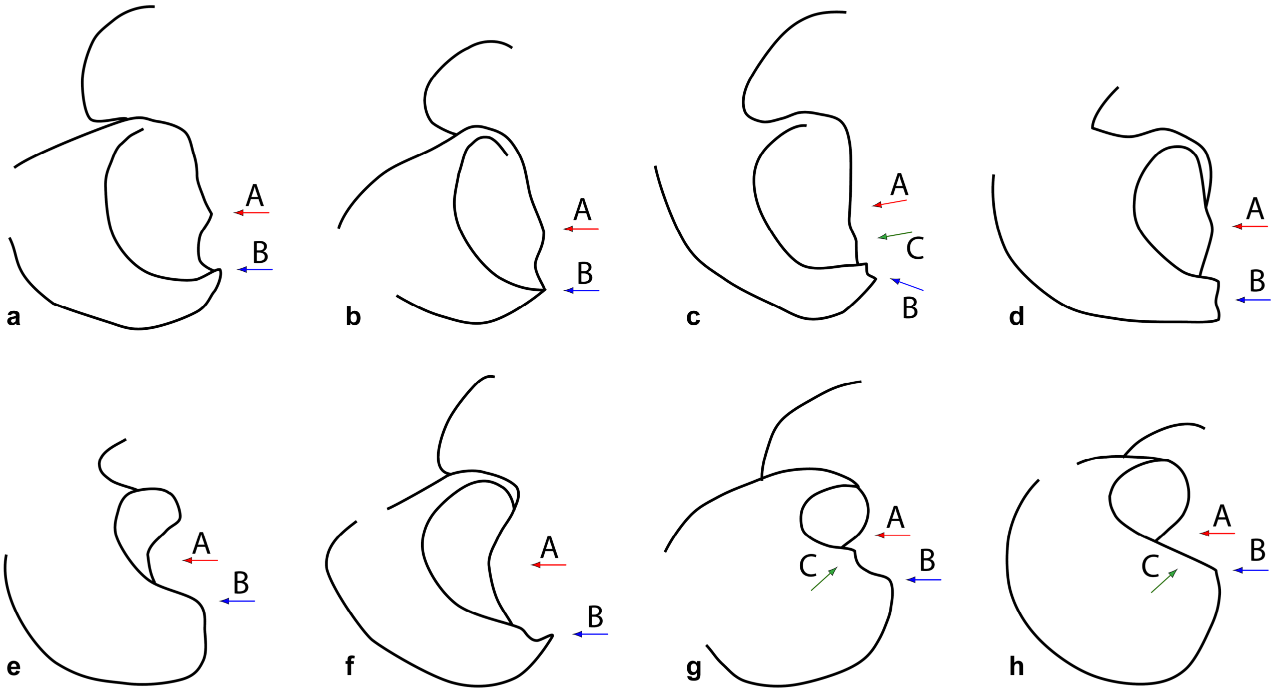


Fig. S4: Paramere structure in posterior view. (a) *Tetramorium caespitum*; (b) *T. hungaricum*; (c) *T. indocile*; (d) *T. immigrans* stat.n.; (e) *T. alpestre*; (f) *T. caucasicum* sp.n.; (g) *T. staerckei* sp.rev.; (h) *T. impurum*.

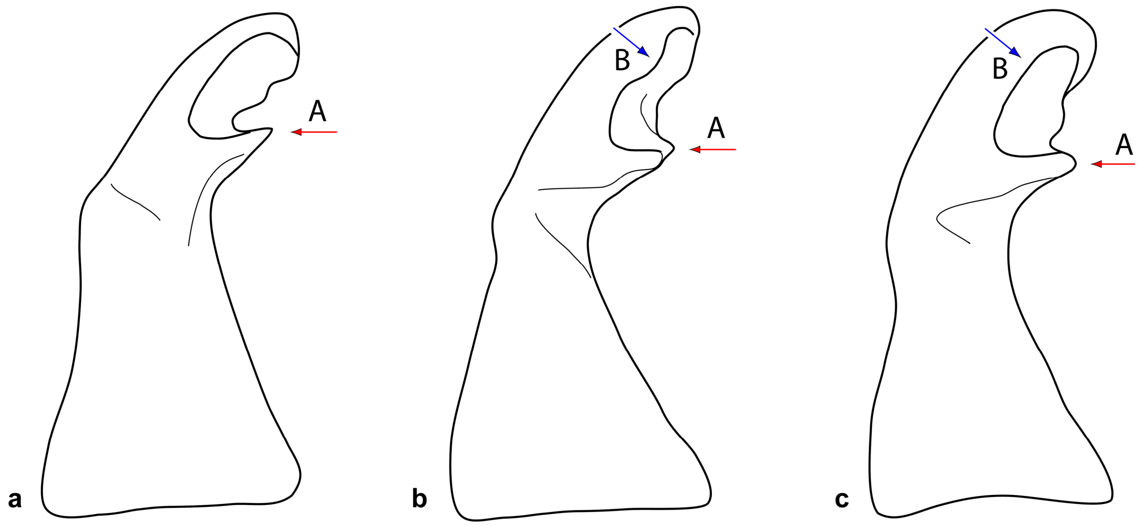


Fig. S5: Paramere structure in dorsal view. (a) *Tetramorium alpestre*; (b) *T. staerckei* sp.rev.; (c) *T. impurum*.