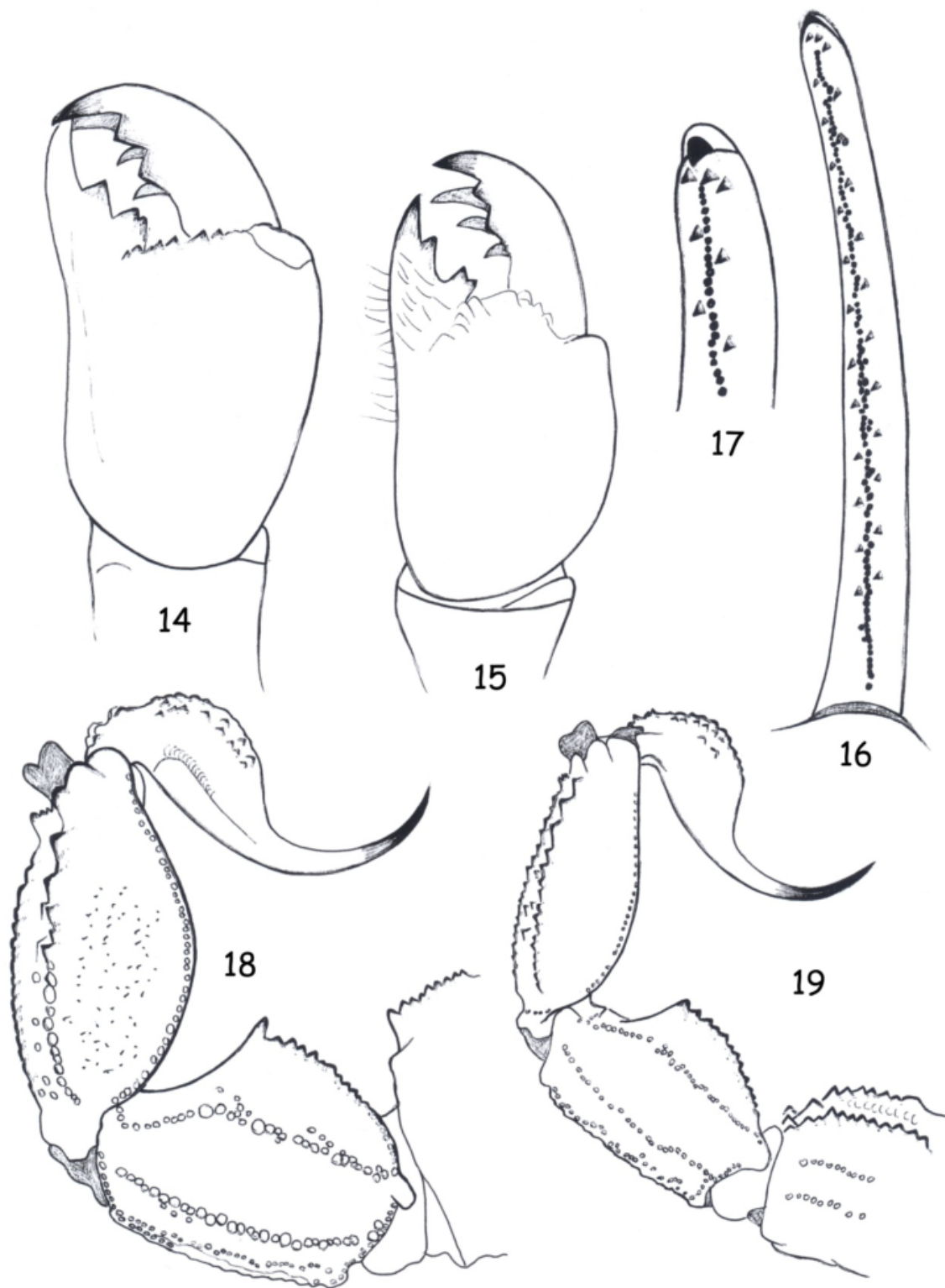
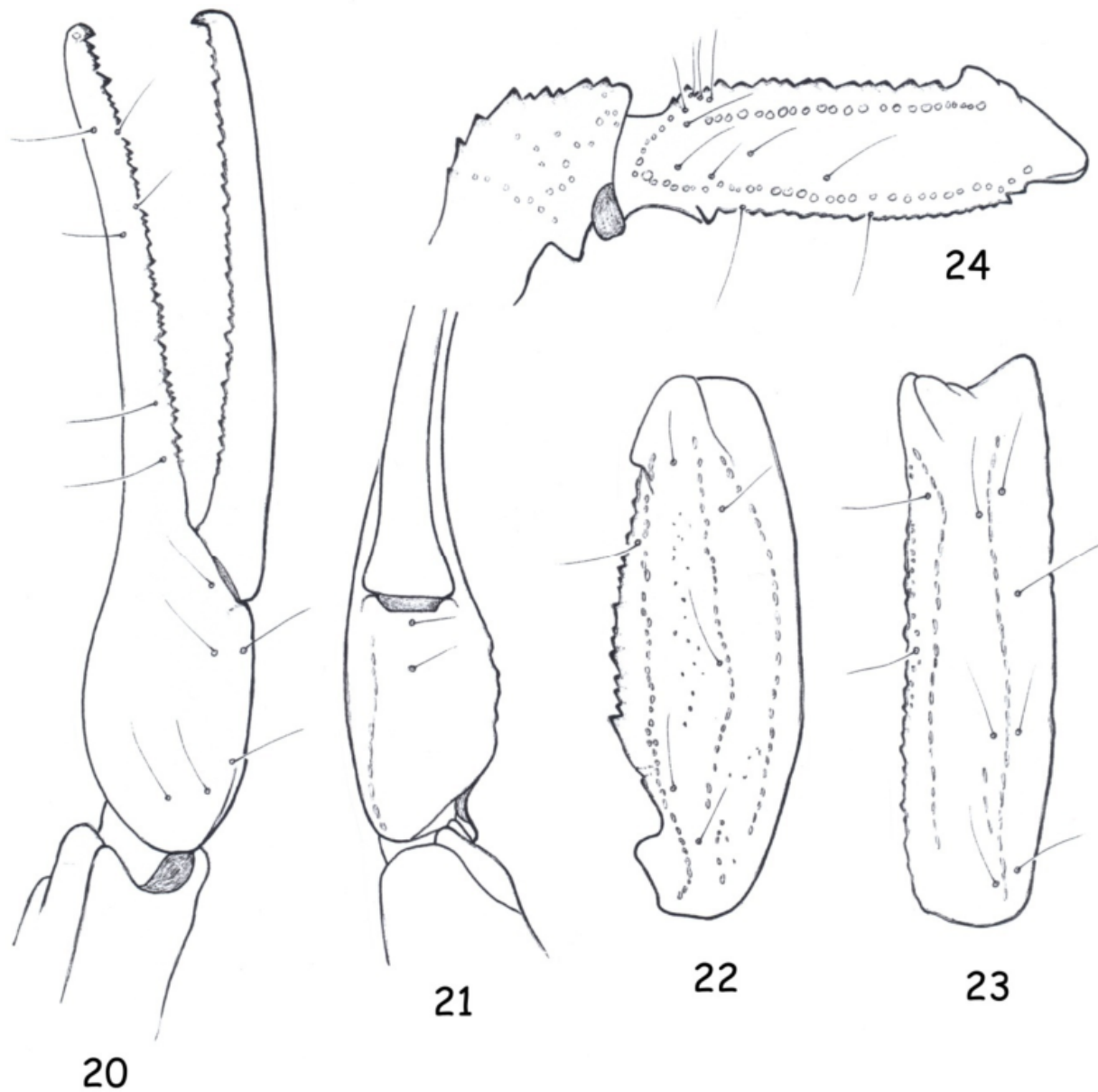


Androctonus tigris
(Lourenço, Rossi & Sadine
2015)



Figs. 14-19. *Androctonus tigris* sp. n. Male holotype (14, 16-18). Female paratype (15, 19). 14-15. Chelicera, dorsal aspect. 16-17. Cutting edge of movable finger showing series of granules, and extremity of the finger in detail. 18-19. Metasomal segments IV-V and telson, lateral aspect.

Relationship: the most closely related species to *Androctonus aeneas* Koch, 1839 is *Androctonus bicolor* Ehrenberg, 1828, from Egypt. The differences between the two species were discussed repeatedly in literature (e. g. Levy & Amitai, 1980; Teruel & Kovařík, 2014). Note that the latter authors redescribed *A. bicolor* and compared it with *A. turieli* (= *A. aeneas*).



Figs. 20-24. *Androctonus tigris* sp. n. Male holotype. Trichobothrial pattern. **20-21.** Chela, dorso-external and ventral aspects. **22-23.** Patella, dorsal and external aspects. **24.** Femur, dorsal aspect.

Description of the new species

Androctonus tigray sp. n. (Figs. 14-24)

Type material: ♂ holotype, ♂ and ♀ paratypes, Ethiopia, Tigray Province [Tigray, according to the Italian original label], leg. Dr. Enrico Cartolari, 1906, (MCVR).

Etymology: the specific name is a noun in apposition to the generic name and refers to the region where the new species was found.

Diagnosis

A scorpion of medium size, with adult male holotype reaching a total length of 65.3 mm (the adult females could reach 70 mm in total length). General coloration reddish-brown to blackish (the specimens clearly show a paler coloration than that of *A. bicolor*); legs dark red; metasomal carinae dark, almost black. Carinae and granulations on carapace and tergites moderately developed; sternite VI with two inconspicuous carinae. Metasomal segments I to V only moderately enlarged distally; dorsal depression on segments I to IV moderately marked; depression on segments I and II with minute granulations; segments I to III with 10 carinae; inframedian carinae complete on segments II-III. Anal arc with three moderately to weakly marked rounded lobes. Pedipalps with an inconspicuous setation on femur and patella; fixed and movable fingers with 12-12 rows of granules. Pectines with 28-28 teeth in the male holotype; male and female paratypes with 26-27 and 22-23 teeth respectively.

Relationships

Androctonus tigray sp. n. can be distinguished from the other species of *Androctonus*, and in particular from *Androctonus bicolor*, by a number of characters: I) paler general coloration, from reddish-brown to blackish; II) different morphometric values (see Table I); chela length/width ratio in males is equal to 5.40 to 5.50 in the new species whereas in *A. bicolor* these values range from 5.95 to 6.20; III) carapace and tergites only weakly to moderately granulated; dorsal depression on metasomal segments I and II with only minute granulations; IV) chela fingers with 12-12 rows of granules while they are 13-14 in *A. bicolor*.

Description based on male holotype and paratypes

Measurements in Table I. Coloration. Mainly dark-brown. Prosoma: carapace dark brown; carinae and eyes marked by dark pigment. Mesosoma: dark brown. Metasoma: segments I to V dark brown; carinae darker than tegument; vesicle dark brown; aculeus reddish at its base and dark brown at its extremity. Venter yellow to brown-yellow; pectines and genital operculum pale yellow; sternites III to VI, in male, with large white spots. Chelicerae brownish-yellow with inconspicuous variegated spots; fingers brownish-yellow with red teeth. Pedipalps dark brown with dark carinae; fingers brownish-yellow with the oblique rows of granules dark red. Legs brownish-yellow.

Morphology. Carapace moderately granular; anterior margin without any median concavity, straight. Carinae moderately marked; anterior median, central median and posterior median carinae moderately granular. All furrows moderate to weak. Median ocular tubercle slightly anterior to the centre of carapace. Eyes separated by slightly more than two ocular diameters. Three pairs of lateral eyes. Sternum triangular and narrow; slightly longer than wide. Mesosoma: tergites moderately granular. Three longitudinal carinae moderately to strongly crenulate in all tergites; lateral carinae reduced in tergites I and II. Tergite VII pentacarinata. Venter: genital operculum divided longitudinally, forming two semi-oval plates. Pectines: pectinal tooth count 28-28 in male holotype; middle basal lamella of the pectines not dilated. Sternites without granules, smooth with elongated spiracles; four moderately marked carinae on sternite VII; two vestigial carinae on sternite VI; other sternites acarinate and with two weakly marked furrows. Metasoma: segments I to III with 10 complete carinae, strongly crenulated; ventral strongly marked; segment IV with 8 carinae, crenulated; the first four segments with a moderately marked dorsal depression, with minute granulations on I and II; segment V with 5 carinae; the latero-ventral carinae crenulate with several lobate denticles; ventral median carina not divided posteriorly; anal arc composed of 17-18 totally inconspicuous ventral teeth, and three moderately to weakly marked rounded lateral lobes. Intercarinal spaces moderately to weakly granular. Telson with moderately marked granulations on ventral surface; other surfaces smooth; aculeus moderately to strongly curved and with about the same length as the vesicle; subaculear tooth absent. Cheliceral dentition as defined by Vachon (1963) for the family Buthidae; external distal and internal distal teeth approximately the same length; basal teeth on movable finger reduced in males but not fused; ventral aspect of both fingers and manus covered with long dense setae. Pedipalps: femur pentacarinata; patella with nine carinae, some weakly marked; internal face of femur and patella with spinoid granules; chela with only vestigial carinae; all faces weakly granular to smooth; setation on pedipalp inconspicuous. Fixed and movable fingers with 12-12 oblique rows of granules. Internal and external accessory granules present but weakly to moderately marked; internal better marked than external; three accessory granules on the distal end of the movable finger next to the terminal denticle. Legs: tarsus with numerous thin setae ventrally; tibial spur moderately marked on legs III and IV; pedal spurs moderate to strong on legs I to IV. Trichobothriotaxy: trichobothrial pattern of Type A, orthobothriotaxic as defined by Vachon (1974). Dorsal trichobothria of femur arranged in β -configuration (Vachon, 1975).

Acknowledgements

We are most grateful to Dr. Leonardo Latella (MCVR) for the study of the material under his care and to Miss Elise-Anne Leguin (MNHN) for her contribution to the preparation of the drawings and photos. We are also grateful to Dr. Alberto Ballerio (ICZN Commissioner) and to an anonymous referee for the precise revision of the article.

Table 1. Morphometric values (in mm) of the adult male holotype of *Androctonus tigris* sp. n. from Ethiopia and of male neotype and female topotype of *Androctonus aeneas* from Algeria.

	<i>A. tigris</i> sp. n. ♂ holotype	<i>A. aeneas</i> ♂ neotype	<i>A. aeneas</i> ♀ topotype
Total length (telson included)	65.3	70.1	74.8
Carapace			
length	7.7	8.5	9.2
anterior width	4.8	5.4	5.7
posterior width	7.8	8.8	9.6
Mesosoma length	16.5	18.5	20.2
Metasomal segment I			
length	5.2	5.4	6.2
width	5.8	7.2	6.8
Metasomal segment II			
length	6.3	6.4	6.7
width	6.8	8.1	7.7
Metasomal segment III			
length	6.6	6.9	7.2
width	7.5	8.4	8.1
Metasomal segment IV			
length	7.7	7.8	8.3
width	7.4	8.2	7.7
Metasomal segment V			
length	8.5	8.8	9.2
width	6.2	7.4	7.0
depth	4.1	5.2	5.2
Telson length	6.8	7.8	7.8
Vesicle			
width	2.9	2.8	3.2
depth	2.4	2.3	2.4
Pedipalp			
Femur length	6.6	7.3	7.6
Femur width	1.9	2.1	2.2
Patella length	8.0	8.6	8.8
Patella width	2.6	2.9	3.0
Chela length	12.1	13.4	13.8
Chela width	2.2	2.2	2.2
Chela depth	2.4	2.6	2.4
Movable finger length	8.8	9.8	10.0

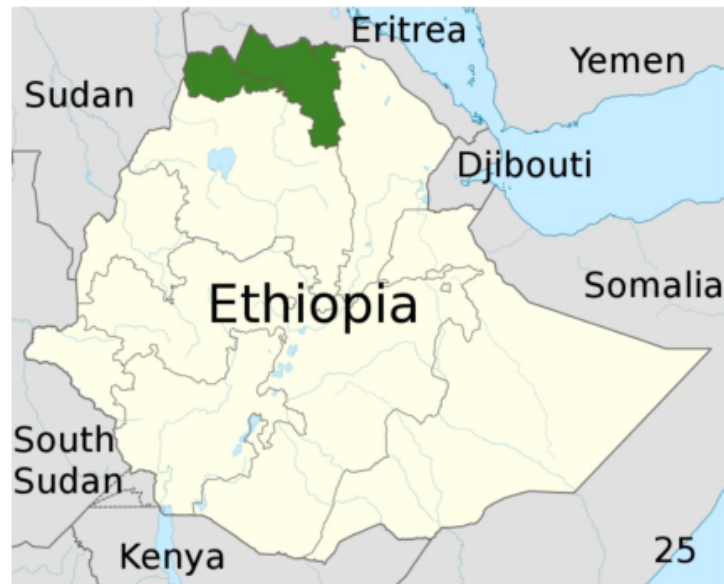


Fig. 25. Map of Ethiopia showing the Tigray province (green colour), type locality of *Androctonus tigrai* sp. n.

Reference:

Lourenco WR, Rossi A, Sadine SE. New data on the genus *Androctonus* Ehrenberg, 1828 (Scorpiones, Buthidae), with the description of a new species from Ethiopia. *Aracnida - Rivista Arachnologica Italiana*. 2015;1(5):11-9.

Revision #2

Created 13 May 2024 23:24:13 by Kim dong hyeon

Updated 14 May 2024 23:14:55 by kkomodo