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Description of a new species of *Acromantis* Saussure, 1870 (Mantodea: Hymenopodidae) from India

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ABSTRACT. *Acromantis lobofemorata* **sp. nov.**, a new praying mantis species of the subfamily Acromantinae (Mantodea: Hymenopodidae), is described from the Southern states of India. The specimens of the present species were misidentified and referred as *Acromantis insularis* on several occasions by earlier workers in India. The new species can be easily identified from other species of the genus by the presence of a mid-lobe on the upper margin of the fore femora, a small medial mesofemoral lobe and well-developed denticles on pronotum laterally. A preliminary key for the identification of the Indian *Acromantis* species is also provided.

Key words: *Acromantis*, new species, praying mantids, south India

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INTRODUCTION

Acromantis Saussure, 1870 is the second largest genus of subfamily Acromantinae (Mantodea: Hymenopodidae) with twenty species distributed from the Indian subcontinent to Northern Australia (Otte et al., 2023). Four species are currently reported from India (Mukherjee et al., 1995) viz. *A. insularis* Giglio-Tos, 1915, *A. montana* Giglio-Tos, 1915, *A. oligoneura* De Haan, 1842 and *A. nicobarica* Mukherjee, 1995 of which the latter was described from the Nicobar Islands and is believed to be endemic to that area. While examining the images of the holotype of *A. insularis* deposited in the Museum für Naturkunde der Humboldt-Universität, Berlin, Germany through the Mantodea Image Database (Svenson et al., 2023), we have noticed some major dissimilarities with the specimens of *Acromantis* currently under description which have been formerly identified as *A. insularis* by Mukherjee et al. (1995). On detailed examination, the specimens were found to not match the description of *A.insularis* or any other currently known species, hence, are described here as a new species. Based on the specimens collected and the data in the platform iNaturalist and the literature, this species is common and widely distributed in the Southern Western Ghats and the adjacent areas.

MATERIAL AND METHODS

The specimens studied were collected from different localities in South Indian states like Kerala and Karnataka and mostly using a light trap. The live photographs were taken using a Canon Powershot SX540 HS camera. The images of the body parts were taken using a Leica DFC 500 camera. The images

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at varying depths were stacked using Leica® Auto Montage Software V3.80. The final illustrations were post-processed using Adobe® Photoshop CS6 software. All specimens studied are deposited in ZSIK. We also studied the observations in the iNaturalist platform for images of specimens of the new species. Based on the collected specimens and the data from iNaturalist and literature, the distribution map of the new species is created using QGIS 3.14.16 software. The classification and genital terminology are according to Schwarz and Roy (2019), and the morphological terminology follows Brannoch et al. (2017).

Abbreviations. **afa:** phalloid apophysis. **AvS**: Anteroventral spines. **DS**: Discoidal spines. **F**: Femur. **fda:** main posterior lobe of right phallomere. **loa:** membranous lobe on left phallomere. **paa:** apical process of left phallomere. **pia:** process posterolateral to pva on right phallomere. **pva:** process anteromesal to pia on right phallomere. **PvS**: Posteroventral spines. **sp. nov**.: new species. **T**: Tibia. **ZSIK**: National Zoological Collections, Zoological Survey of India, Western Ghat Regional Centre, Kozhikode.

RESULTS

Taxonomic hierarchy

Class Insecta Linnaeus, 1758

Order Mantodea Latreille, 1802

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Acromantinae Brunner de Wattenwyl, 1893

Tribe Acromantini Brunner de Wattenwyl, 1893

Genus *Acromantis* Saussure, 1870

Type species. *Mantis oligoneura* De Haan, 1842

Diagnosis. This genus is very similar to the genus *Citharomantis* Rehn, 1909. Both genera have the following characteristics in common: 1) a tubercle on the upper edge of lower frons and on the vertex, 2) lateral edges of pronotum denticulated, 3) mid and hind femora with a pre-apical lobe, 4) apex of hind wings truncated. The genus *Acromantis* mainly differs from all other genera in the tribe Acromantini by the absence of black band on the apex of fore coxa ventrally.

Acromantis lobofemorata Kamila & Sureshan **sp. nov.** (Figs 1–19, Table 1)
https://zoobank.org/urn:lsid:zoobank.org:act:3A41F820-6BAA-4523-B07F-BA5728E4CEA3

Materials examined. **Holotype.** ♂, INDIA, Kerala, Palakkad, Parambikulam Tiger Reserve, Sungam Range, Civet Valley Road (10°26'13.2"N, 76°46'48"E, 548 m), 30.x.2022, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 22443, pinned. **Paratypes.** 1 ♂, Kerala, Kasaragod, Ranipuram (12°25'37.2"N, 75°21'39.6"E, 588 m), 05.i.2013, K. Rajmohana, Reg. No. ZSI/WGRC/I.R- INV. 23460, pinned. 1 ♂, Kerala, Kozhikode, Jaffer Khan Colony, ZSI Campus (11°15'46.8"N, 75°47'9.6"E, 27 m), 29.x.2014, Reg. No. ZSI/WGRC/I.R- INV. 23469, pinned. 1 ♂, Kerala, Kozhikode, Jaffer Khan Colony, ZSI Campus (11°15'46.8"N, 75°47'9.6"E, 27 m), 20.xi.2019, A.P. Kamila, Reg. No. ZSI/WGRC/I.R- INV. 16830, pinned. 1 ♂, Kerala, Kozhikode, Jaffer Khan Colony, ZSI Campus (11°15'46.8"N, 75°47'9.6"E, 27 m), 9.xii.2019, A.P. Kamila, Reg. No. ZSI/WGRC/I.R- INV. 25741, pinned. 1 ♀, Kerala, Malappuram, Thenhipalam, Calicut University Campus (11°07'58.8"N, 75°53'27.6"E, 99 m), 20.xii.2019, A.P. Kamila, Reg. No. ZSI/WGRC/I.R- INV. 25742, pinned. 1 ♀, Karnataka, Shimoga, Agumbe, Kalinga Centre for Rainforest Ecology (13°16'30"N, 75°06'25.2"E, 700m), 27.xii.2019, P. Girish Kumar & Party, Reg. No. ZSI/WGRC/I.R- INV. 13649, pinned. 1 ♂, Karnataka, Shimoga, Hosagadde, Near Kudajadri (13°30'39.6"N, 75°09'36"E, 660 m), 28.xii.2019, P. Girish Kumar & Party, Reg. No. ZSI/WGRC/I.R- INV. 25743, pinned. 1 ♂, Kerala, Malappuram, Nilambur, KFRI Subcentre (11°18'10.8"N, 76°15'3.6"E, 63 m), 28.ii.2020. A.P. Kamila, Reg. No. ZSI/WGRC/I.R- INV. 14960, pinned. 1 ♀, Kerala, Malappuram, Nilambur, KFRI Subcentre (11°18'10.8"N, 76°15'3.6"E, 63 m), 29.ii.2020. A.P. Kamila, Reg. No.

ZSI/WGRC/I.R- INV. 25744, pinned. 1 ♂, Kerala, Wayanad, Tholpetty (11°57'10.8"N, 76°3'36"E, 929 m), 08.x.2021, A.P. Kamila, Reg. No. ZSI/WGRC/I.R- INV. 25745, pinned. 1 ♂, Karnataka, Shimoga, Mookambika Wildlife Sanctuary, Hulikkal FRH (13°43'30"N, 75°00'36"E, 571 m), 06.ix.2021, V.D. Hegde & Party, Reg. No. ZSI/WGRC/I.R- INV. 19495, pinned. 1 ♀, Kerala, Thiruvananthapuram, Neyyar Wildlife Sanctuary, Forest IB (08°32'2.4"N, 77°08'56.4"E, 109 m), 02.xii.2021, P. Girish Kumar & Party, Reg. No. ZSI/WGRC/I.R- INV. 25746, pinned. 1 ♀, Kerala, Malappuram, Nilambur, MES Mampad (11°14'16.8"N, 76°11'42"E, 48 m), 09.iii.2022. A.P. Kamila, Reg. No. ZSI/WGRC/I.R- INV. 25747, pinned. 1 ♂, Kerala, Malappuram, Nilambur, KFRI Subcentre (11°18'10.8"N, 76°15'3.6"E, 63 m), 22.iv.2022. Jafer Palot & Party, Reg. No. ZSI/WGRC/I.R- INV. 25748, pinned. 1 ♂, Kerala, Palakkad, Parambikulam Tiger Reserve, Sungam Range, Civet Valley Road (10°26'13.2"N, 76°46'48"E, 548 m), 28.x.2022, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 22445, pinned. 1 ♀, Kerala, Palakkad, Parambikulam Tiger Reserve, Sungam Range, Civet Valley Road (10°26'13.2"N, 76°46'48"E, 548 m), 30.x.2022, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 22444, pinned. 1 ♀, 4 ♂♂, Karnataka, Shimoga, Mookambika Wildlife Sanctuary, Hulikkal FRH (13°43'30"N, 75°00'36"E, 571 m), 15.vi.2023, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 24087-90, in ethanol. 1 ♀, 1 ♂, Karnataka, Shimoga, Mookambika Wildlife Sanctuary, Hulikkal FRH (13°43'30"N, 75°0'36"E, 571 m), 16.vi.2023, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 25749, pinned. 1 ♀, 4 ♂♂, Karnataka, Shimoga, Mookambika Wildlife Sanctuary, Hulikkal FRH (13°43'30"N, 75°00'36"E, 571 m), 16.vi.2023, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 25750, in ethanol. 1 ♂, Karnataka, Shimoga, Mookambika Wildlife Sanctuary, Hulikkal FRH (13°43'30"N, 75°00'36"E, 571 m), 19.vi.2023, Bindu L. & Party, Reg. No. ZSI/WGRC/I.R- INV. 25020, in ethanol. 1 ♂, Karnataka, Uttara Kannada, Kali Tiger Reserve, Castle Rock (15°24'00"N, 74°19'22.8"E, 572 m), 03.viii.2023, Jafer Palot & Party, in ethanol. 1 ♂, Karnataka, Uttara Kannada, Kali Tiger Reserve, Kumbharwada (15°07'40.8"N, 74°24'14.4"E, 600 m), 09.viii.2023, Jafer Palot & Party, in ethanol. 1 ♂, Kerala, Palakkad, Parambikulam Tiger Reserve, Civet Valley (10°26'13.2"N, 76°46'48"E, 548 m), 16.viii.2023, V.D. Hegde & Party, Reg. No. ZSI/WGRC/I.R- INV. 25021, in ethanol. 1 ♀, Kerala, Palakkad, Parambikulam Tiger Reserve, Bison Valley Guest House (10°23'45.6"N, 76°46'30"E, 606 m), 21.viii.2023, V.D. Hegde & Party, Reg. No. ZSI/WGRC/I.R- INV. 25220, in ethanol. 1 ♀, 1 ♂, Kerala, Palakkad, Parambikulam Tiger Reserve, Bison Valley Guest House (10°23'45.6"N, 76°46'30"E, 606 m), 22.viii.2023, V.D. Hegde & Party, Reg. No. ZSI/WGRC/I.R- INV. 25029-30, in ethanol.

Observations in iNaturalist. 1 ♀, Karnataka, Madugundi (13°07'58.8"N, 75°26'49.2"E), Tejas Mehendale (iNaturalist: 192166382). 1 ♂, 2 ♀♀, Kerala, Idukki, Udumbanchola (09°38'45.6"N, 77°10'33.6"E), Seema Merchant (iNaturalist: 163776409; 140745454; 120470150). 1 ♂, Karnataka, Shimoga, Mandagadde Bird Sanctuary (13°33'57.6"N, 75°08'2.4"E), Swarochi Tathagath (iNaturalist: 162273772), 1 ♂, Karnataka, Shimoga, Mandagadde Bird Sanctuary (13°33'57.6"N, 75°8'2.4"E), Samrudh Nandagopal (iNaturalist: 162030195). 1 Nymph, Kerala, Thiruvananthapuram, Thambanoor (08°40'55.2"N, 77°08'13.2"E), Balachandran V (iNaturalist: 144407676). 1 ♀, Karnataka, Golagande (12°58'22.8"N, 75°52'12.0"E), Deekshith P. (iNaturalist: 131570324). 1 ♀, Kerala, Thiruvananthapuram, Neyyar Wildlife Sanctuary (08°40'55.2"N, 77°08'13.2"E), Tarunkishwor Yumnam (iNaturalist: 129379152). 1 ♂, Kerala, Thrissur, KFRI Campus (10°31'48"N, 76°20'49.2"E), Sarath Muthery (iNaturalist: 108647245). 1 ♀, Karnataka, Kodagu (12°31'30"N, 75°37'33.6"E), Hopeland, P. (iNaturalist: 102291935).

Etymology. The species name '*lobofemorata*' is formed by the juxtapositioning of the two Latin words '*lobus*' (meaning lobe) and '*femora*' due to the presence of a median lobe on the upper edge of the fore femora.

Differential diagnosis. The new species can be distinguished from all other species of the genus by the following characteristics: 1) presence of a hump-like lobe on the upper margin of the fore femora a little proximal to the middle, 2) presence of a small medial mesofemoral lobe, 3) well-developed basal lobe on meso- and metafemora, 4) well-developed lateral pronotal denticles, 5) abdominal sternites 5th and 6th with a triangular median lobe on the lower edge. Spination formula of fore leg: F= 4DS/13AvS/4PvS; T= 13AvS/12PvS.

Description. — **Holotype** ♂. Body medium-sized, greenish brown coloured (Figs 2, 5).

Head (Figs 7, 9). Triangular. Compound eyes oval, bulging. Lower frons pentagonal, wider than long, upper margin angular with a tubercle, lower margin a little arched with round corners. Ocelli distinct, well-developed, situated close to each other, mid ocellus round, lateral ones oval. Antennae filiform, scapus barrel shaped, pedicellus apically lobous, flagellomeres proximally pale brown in colour gradually darkening towards apex; completely wrapped in minute ciliae except on the gap between two segments. Vertex with a triangular, well-raised tubercle just behind the ocelli, with a ventral deep notch and rounded apex. Vertex slightly elevated behind the tubercle. Juxta-ocular bulges indistinct.

Pronotum (Fig. 11). Elongated, laterally compressed, with a mid-groove starting from just above the dilation to the end. Prozone anteriorly round, laterally with 5-6 black denticles. Supra-coxal dilation well-developed with a small lateral dorsal expansion. Metazone about 2.3 times as long as prozone, laterally with 7-8 large and small black, alternately positioned denticles of different sizes. Prosternum completely blackish ending with a half bone shape.

Fore legs (Figs 13, 15). Coxae a little shorter than metazone; dorsal edge with seven yellowish spines; lateral borders with small, black spinules. Femora with four posteroventral spines; four discoidal spines, fourth very small and completely blackish, third one longest, about two times longer than the second one (4<1<2<3); thirteen anteroventral spines (iIiIiIiIiIiI I), all large ones brownish, dark at bases and apices. All other femoral spines dark at apices only. Genicular spines small. Tibial spur groove situated at basal third. Upper edge of femora with a small lobe almost at middle; margin bordered with small tubercles. Femora ventrally with a ridge just above midline. Tibiae with almost straight upper edge; twelve closely placed, decumbent posteroventral spines, distal spine about 2.5 times longer than the previous one; thirteen anteroventral spines. Both rows of tibial spines gradually increase in length towards apex. Basitarsus longer than other segments together.

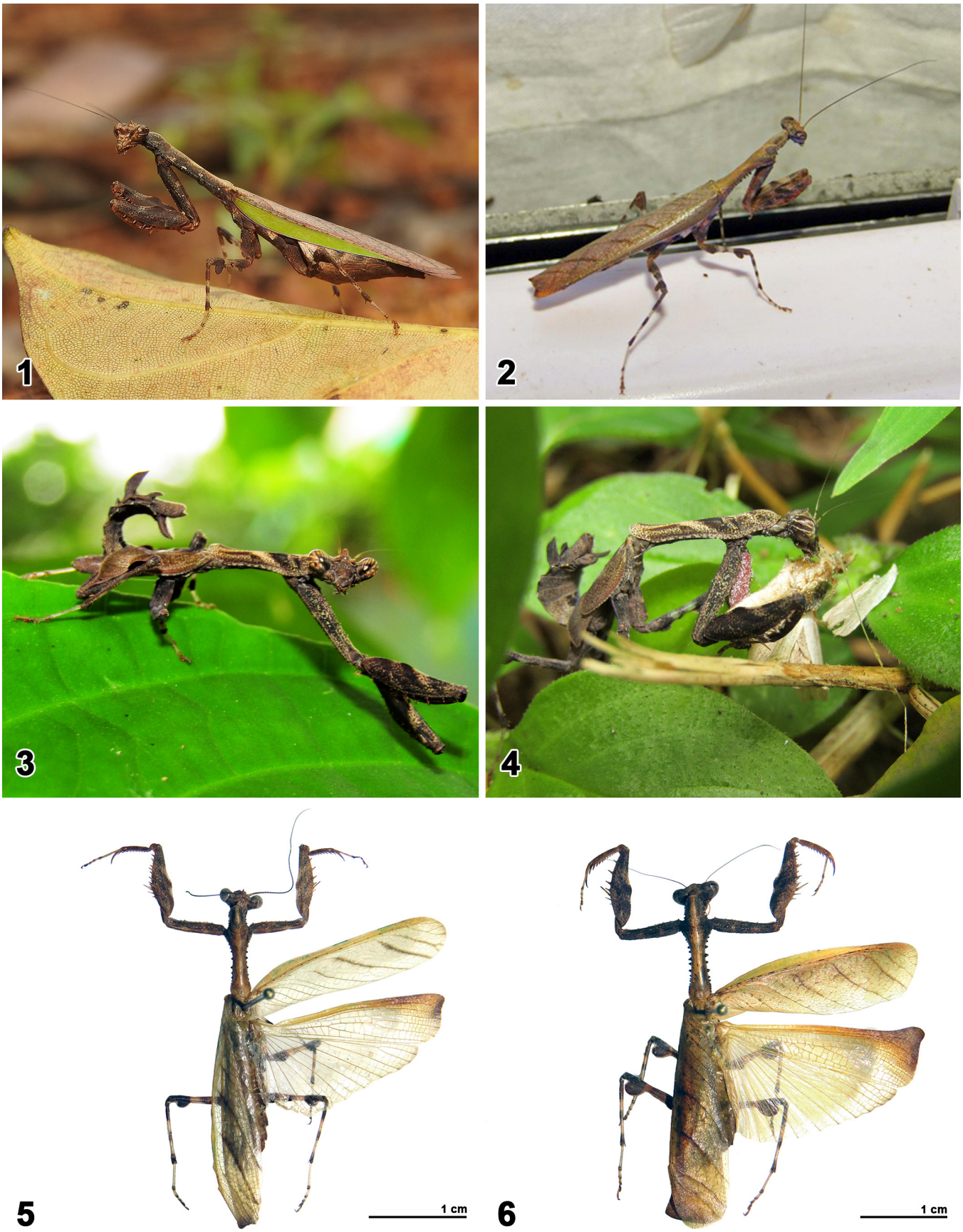
Mid and hind legs (Fig. 17). Coxae with strong carinae. Mesofemora with three ventral lobes; proximal lobe triangular, elongated; mid one small; distal one large, semi-circular. Metafemora with three ventral lobes; proximal narrow, elongated; mid one indistinct, narrow; distal one semi-circular, larger than posteroventral mesofemoral lobe. Femora and tibia with three blackish bands; bands around lobes in femur; a little sinuate just after second band on femur and tibia. Tibia apically with two spines and a triangular process. Basitarsus in mid and hind legs shorter and almost equal in length than other segments together, respectively. All tarsomeres apically with two spines and a triangular lobe as in tibia.

Wings (Fig. 5) *and abdomen*. Costal area of fore wings green, sub-opaque, with wide apex. Apex of hind wings truncated with brownish patch, densely reticulated. Lower edge of abdominal sternites 5th and 6th with a triangular median lobe, a longitudinal mid-carina on it.

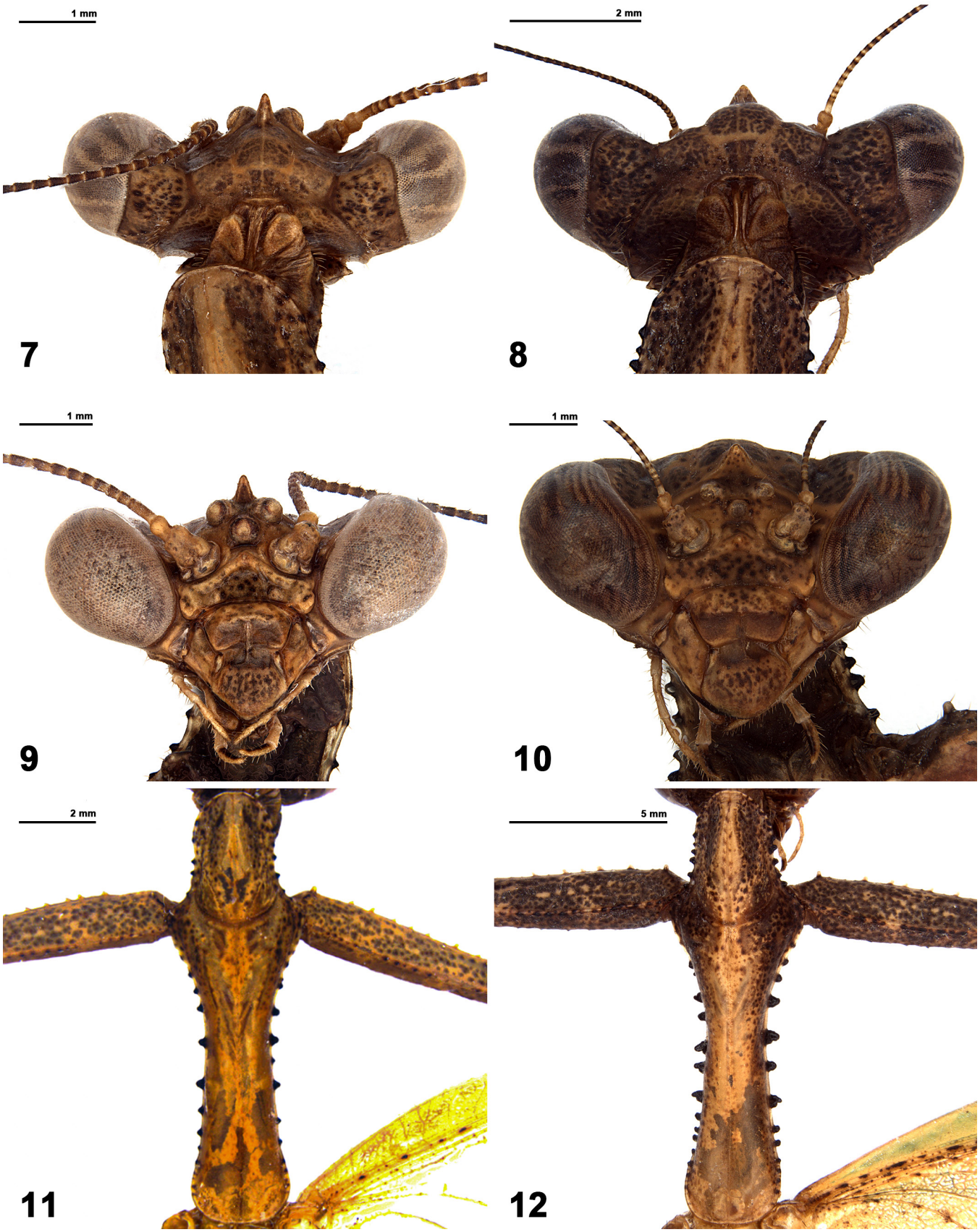
Male genitalia (Fig. 19). Apical process of left phallomere (**paa**) and **loa** short and rounded; **afa** highly sclerotized, cone-shaped with round apex, completely covered with small spines. Ventral phallomere broad, without any distal processes. Right phallomere with horseshoe-shaped, strongly sclerotized **pva**; oval shaped **pia** and triangular, sparsely ciliate **fda**.

Female (Paratype Reg. No. 22444). Very similar to male. Body larger and darker than in male (Figs 1, 6). Lower frons with two small paramedian tubercles; upper edge tubercle placed straight to upward (Fig. 10). Vertical process pyramidal without any notches on it (Fig. 8). Lateral pronotal denticles more developed than that of male (Fig. 12). Lobe on upper edge of fore femora (Figs 14, 16) and mesofemoral midial lobe (Fig. 18) more developed than in males. Costal area of fore wings yellowish green, opaque. Costal area of hind wings sub-hyaline, discoidal area opaque with a semi-circular lobe at upper tip, more reticulated than in males (Fig. 6).

Distribution. India – Goa, Karnataka, Kerala, Tamil Nadu (Fig. 20).



Figures 1–6. *Acromantis lobofemorata* Kamila & Sureshan **sp. nov.** 1–4. Photographs of live specimens. **1.** Female (©Hopeland P.); **2.** Male; **3.** Female nymph; **4.** Female nymph preying on a moth (Figs 2-4 ©Kamila A.P.); **5.** Holotype male habitus, dorsal view; **6.** Paratype female habitus, dorsal view.



Figures 7–12. *Acromantis lobofemorata* Kamila & Sureshan **sp. nov.**, Holotype male (7, 9, 11) and Paratype female (8, 10, 12). **7–8.** Head, dorsal view; **9–10.** Head, frontal view; **11–12.** Pronotum, dorsal view.

Figures 13–18. *Acromantis lobofemorata* Kamila & Sureshan **sp. nov.**, Holotype male (13, 15, 17) and Allotype female (14, 16, 18). **13–14.** Fore leg, dorsal view; **15–16.** Fore leg, ventral view; **17–18.** Mid and hindlegs ventral view.

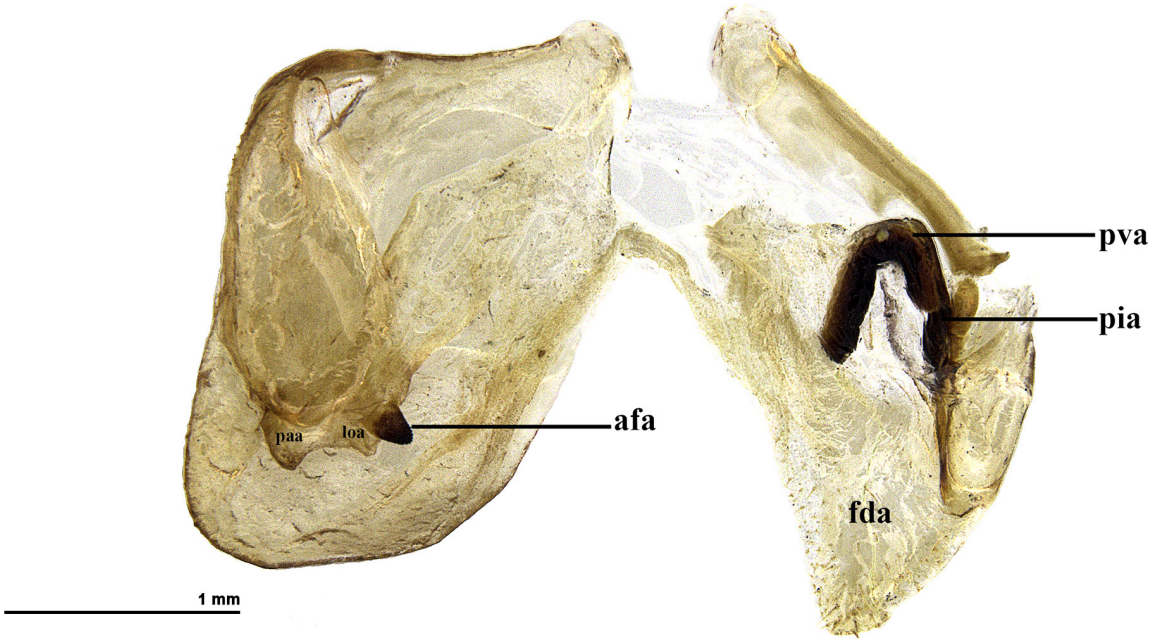


Figure 19. *Acromantis lobofemorata* Kamila & Sureshan **sp. nov.** Male genitalia, dorsal view.

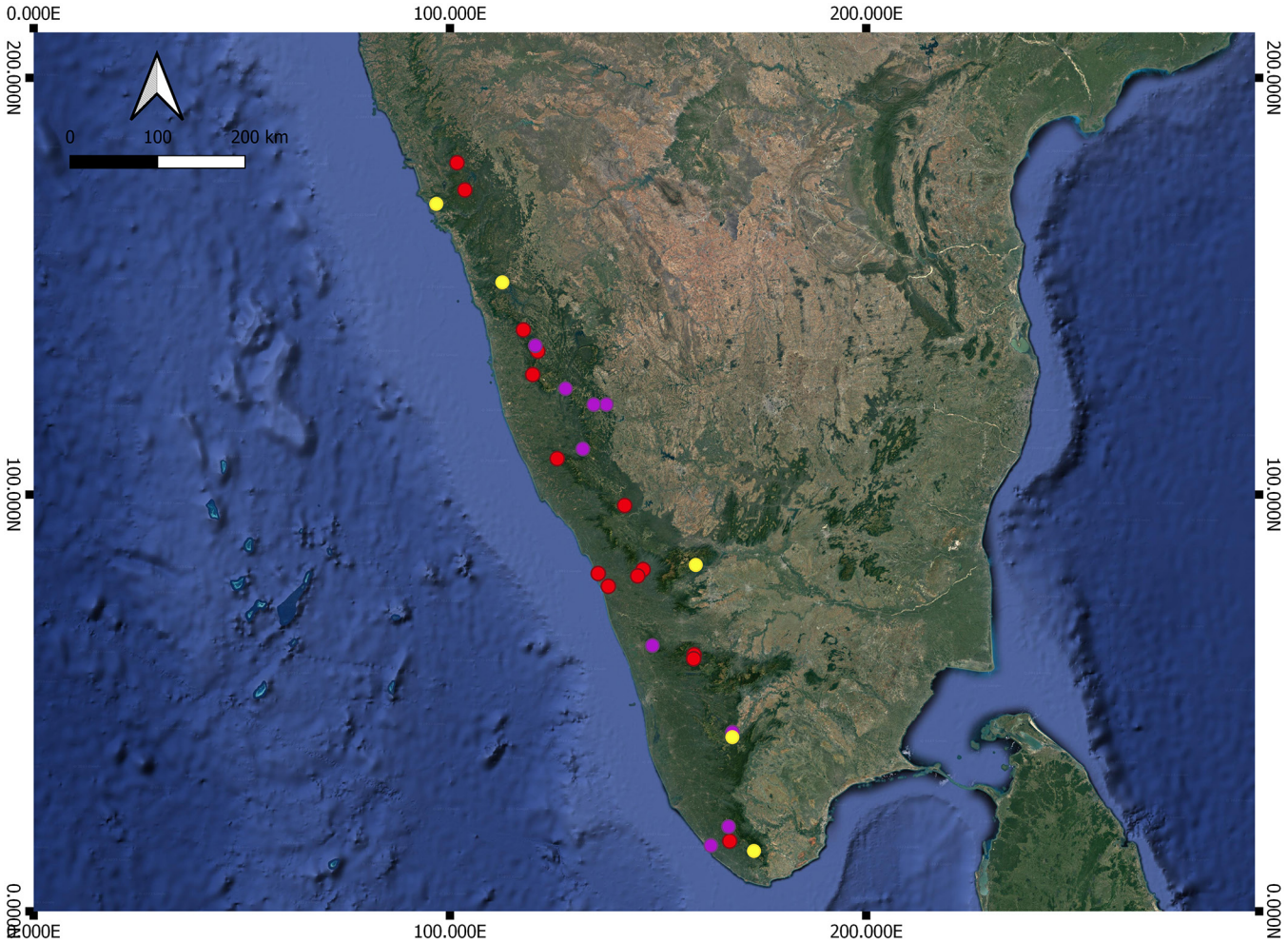


Figure 20. Distribution map for *Acromantis lobofemorata* Kamila & Sureshan **sp. nov.** in India. Red spot: examined materials at ZSIK; Yellow spot: data from literature; Violet spot: data from iNaturalist.

Table 1. Detailed measurements of *Acromantis lobofemorata* Kamila & Sureshan **sp. nov.** (in mm).

Measurements	Holotype ♂	Paratype ♀ (Reg. No. 22444)	Paratype ♂
Body length with wings	40.672	50.67	39.53–42.72
Body length, from vertex to apex of abdomen	32.922	35.153	29.76–33.10
Head length	3.179	4.21	03.04–3.307
Head width	5.234	6.40	05.24–5.822
Height of lower frons	0.591	0.67	00.63–00.69
Width of lower frons	1.761	2.22	01.75–01.83
Pronotum	10.869	13.63	10.08–11.40
Prozone	3.359	4.25	03.22–03.45
Metazone	7.469	9.37	06.79–07.98
Fore leg:			
Coxa	6.973	9.03	6.51–7.21
Trochanter	2.064	2.67	1.62–2.10
Femur	8.546	10.72	7.78–8.51
Tibia	3.984	4.73	3.76–4.66
Basitarsus	3.114	3.54	2.88–2.91
Other tarsal-segments	2.422	2.55	2.11–2.50
Mid leg:			
Coxa	3.496	5.01	3.26–3.30
Trochanter	0.927	1.38	0.89–1.06
Femur	6.667	7.60	6.02–6.52
Tibia	5.268	6.38	5.11–5.54
Basitarsus	2.201	2.55	2.26–2.25
Other tarsal– segments	2.876	3.51	2.68–3.01
Hind leg:			
Coxa	3.11	4.82	3.32–3.55
Trochanter	1.121	1.63	1.11–1.36
Femur	8.196	9.32	7.44–8.20
Tibia	7.428	8.95	6.85–7.92
Basitarsus	3.153	3.21	3.10–3.16
Other tarsal–segments	3.005	3.84	2.99–3.09
Fore wing	26.874	29.70	26.08–26.45
Hind wing	23.950	25.715	23.33–23.68

Key to the Indian Acromantis species

[The Key is prepared by studying the available specimens and referring to the original description of the species]

1 Upper edge of fore femora with a hump–like lobe a little proximal to middle. Mesofemora with a small medial lobe. ..... ***A. lobofemorata* sp. nov.**

— Upper edge of fore femora a little dilated, but not with a hump-like lobe. Mesofemora without medial lobe. **2**

2 Vertex without any tubercle behind ocelli. ..... ***A. nicobarica* Mukherjee, 1995**

— Vertex with a tubercle behind ocelli. **3**

3 Longer anteroventral spines of fore femora completely black. ..... ***A. montana* Giglio-Tos, 1915**

— Longer anteroventral spines of fore femora brownish and black at apices only. ..... ***A. oligoneura* De Haan, 1842**

DISCUSSION

Mukherjee et al. (1995), one of the major works on the Indian mantid fauna, examined five male specimens from Karnataka, Kerala and Tamil Nadu and misidentified all of them as *Acromantis insularis*. Thus, the key and the distributional data provided in that work created a domino effect and led to the misidentification of the same species afterwards. Chandra & Sharma (2009) and Sharma & Chandra (2013) listed the mantids of Tamil Nadu and Karnataka states, respectively, including *A. insularis* by sieving out the data from Mukherjee et al. (1995). Vyjayandi et al. (2010) recorded the presence of the same species in Goa by studying two female and one male specimens. Through a photograph taken from Kanyakumari Wildlife Sanctuary, Tamil Nadu, Mukherjee et al. (2017) identified an *Acromantis* specimen as *A. oligoneura*. That specimen was actually a female *Acromantis lobofemorata* **sp. nov.** The checklists by Mukherjee et al. (2014), and Kamila and Sureshan (2022) also mentioned the presence of *A. insularis* in India, Nepal and Indonesia (Java and Sumatra). Ehrmann & Borer (2015) confirmed the absence of *A. insularis* in Nepal which eventually could lead to the authentification of the distribution of this species being restricted to Sundaland. Like this, two of three Indian *Acromantis* species, *A. montana* and *A.oligoneura,* were also described from the Indonesian Islands which are geographically very distant from India. Hence, there is a chance that they might also suffer from misidentification. A comparison with the respective type specimens and a detailed study of the morphology and male genital structures of the Indian *Acromantis* specimens that were tagged as *A. montana* and *A. oligoneura* may reveal the true identity of the specimens and also get clarity on the *Acromantis* species of India.

AUTHOR'S CONTRIBUTION

The authors confirm their contribution in the paper as follows: A.P. Kamila: Identification of the specimen, drafting and revising the manuscript, photography, preparing the distribution map, funding acquisition; P.M. Sureshan: Supervisor, technical review of the manuscript. The authors read and approved the final version of the manuscript.

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AVAILABILITY OF DATA AND MATERIAL

The specimens listed in this study are deposited in the National Zoological Collections, Zoological Survey of India, Western Ghat Regional Centre, Kozhikode and are available from the curator, upon request.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this paper.

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توصیف یک گونه جدید از جنس *Acromantis* Saussure, 1870 (Mantodea: Hymenopodidae) از هند

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چکیده: یک گونه جدید از آخوندک‌ها به نام *Acromantis lobofemorata* **sp. nov.**، متعلق به زیرخانواده Acromantinae (Mantodea: Hymenopodidae) از ایالت‌های جنوبی هند توصیف شد. نمونه‌های این گونه در چندین مورد توسط محققان دیگر در هند اشتباها به عنوان *Acromantis insularis* شناسایی و ارجاع داده شده بودند. این گونه جدید بر اساس وجود یک لوب میانی در لبه فوقانی ران جلو، لوب کوچک ران میانی و دندانه‌های توسعه یافته در حاشیهٔ جانبی پیش‌گرده به راحتی از سایر گونه‌های این جنس قابل تشخیص می‌باشد. یک کلید شناسایی اولیه برای شناسایی گونه‌های *Acromantis* در هند نیز ارایه شد.

واژگان کلیدی: آکرمانتیس، گونه جدید، آخوندک، جنوب هند.