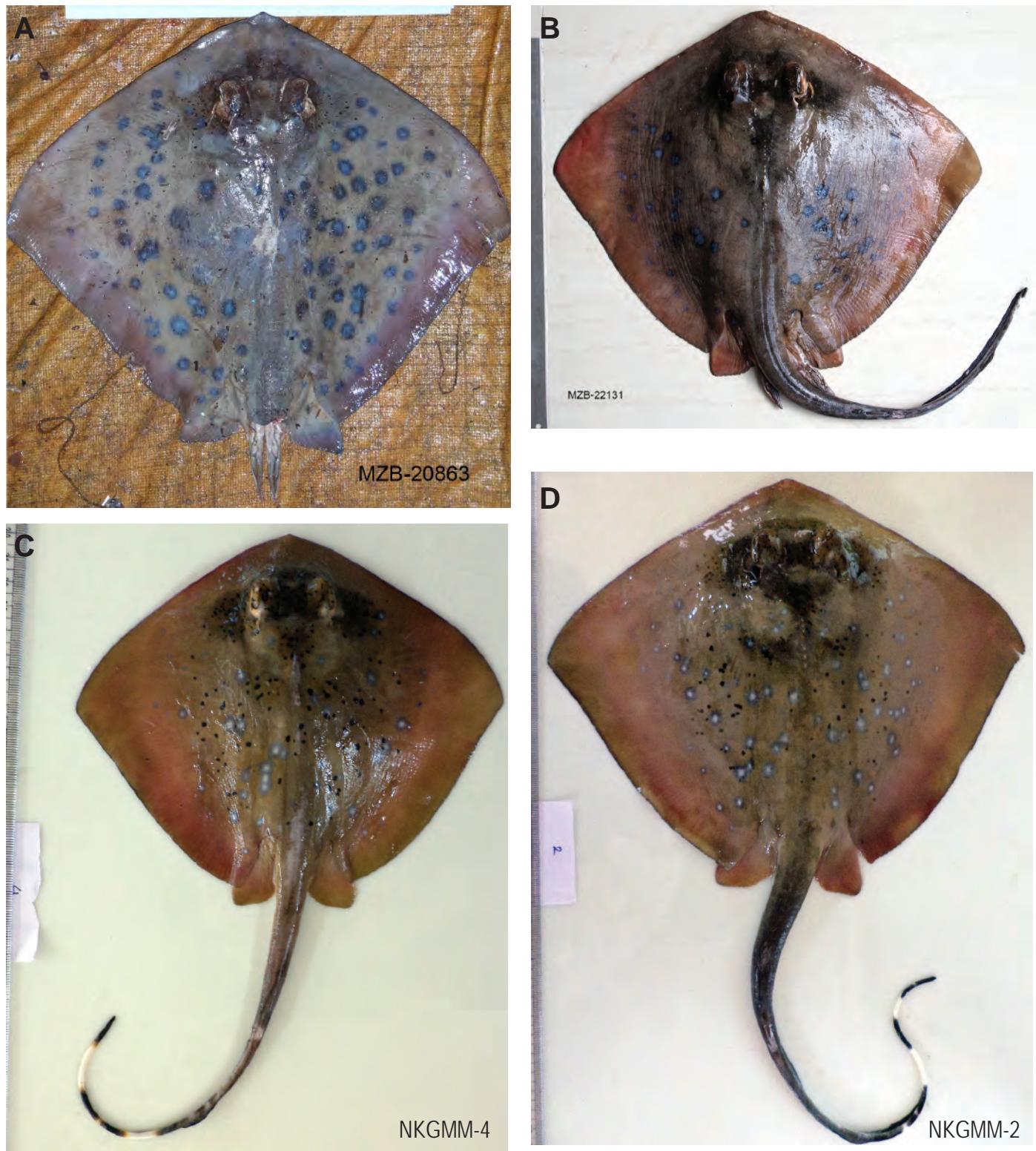


Supplementary material to:

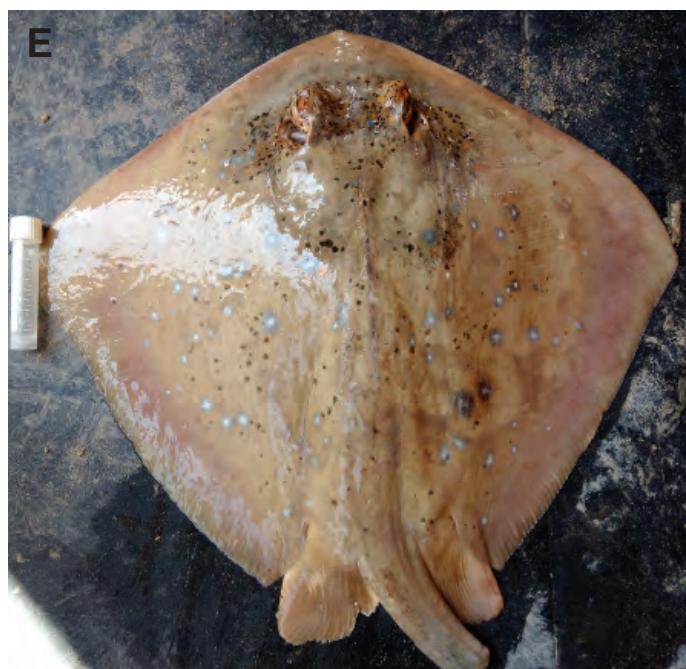
***Neotrygon indica* sp. nov., the Indian-Ocean blue spotted maskray (Myliobatoidei, Dasyatidae)**

By: Annam Pavan-Kumar, Rajan Kumar, Pranali Pitale, Kang-Ning Shen, and Philippe Borsa

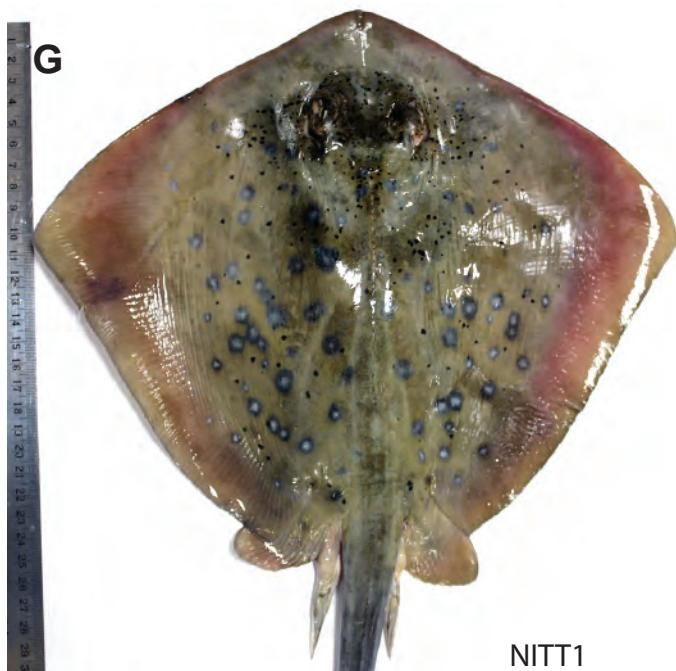
Supplementary Figs. S1-S8 here appended.



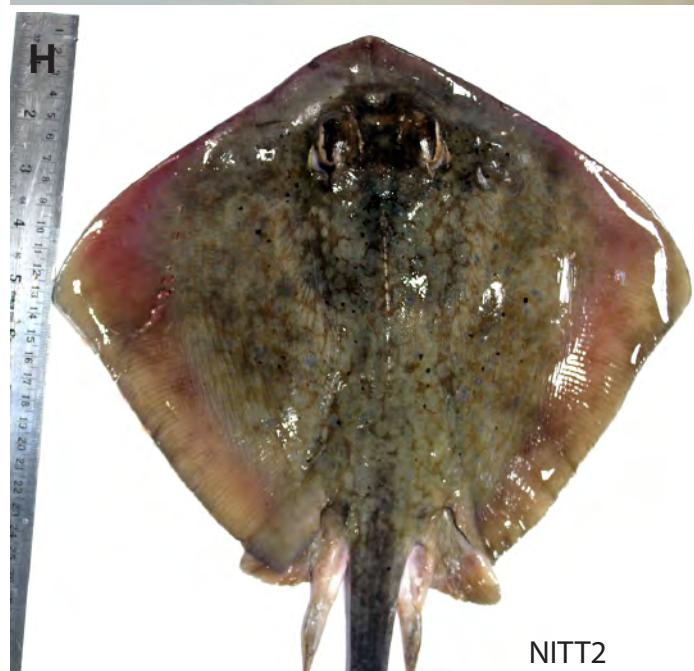
Supplementary Fig. S1. *Neotrygon* spp. Photographs of new specimens analyzed for dorsal spot patterns. **A.** *N. australiae* specimen MZB-20863 from Tanjung Sulamo, western Timor island, Aug. 2010 (courtesy of I.S. Arlyza, LIPI and T. Arifin, Indonesian ministry of Fisheries). **B.** *N. caeruleopunctata* specimen no. MZB-22131 from Kedongan, Bali island, Sep. 2013 (courtesy of Rumini, Proyek BioKar). **C.** *N. indica* sp. nov. specimen no. NKGMM-4 from the gulf of Mannar, India (RK). **D.** *N. indica* sp. nov. specimen no. NKGMM-2 from the gulf of Mannar, India (RK).



NKTT2

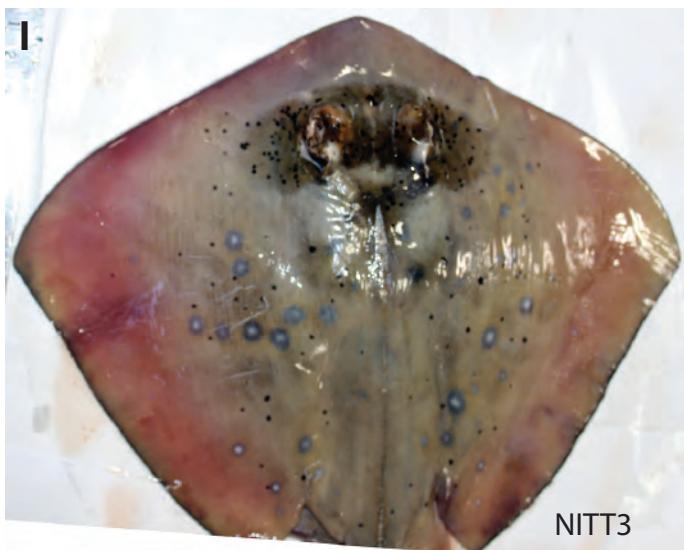


NITT1



NITT2

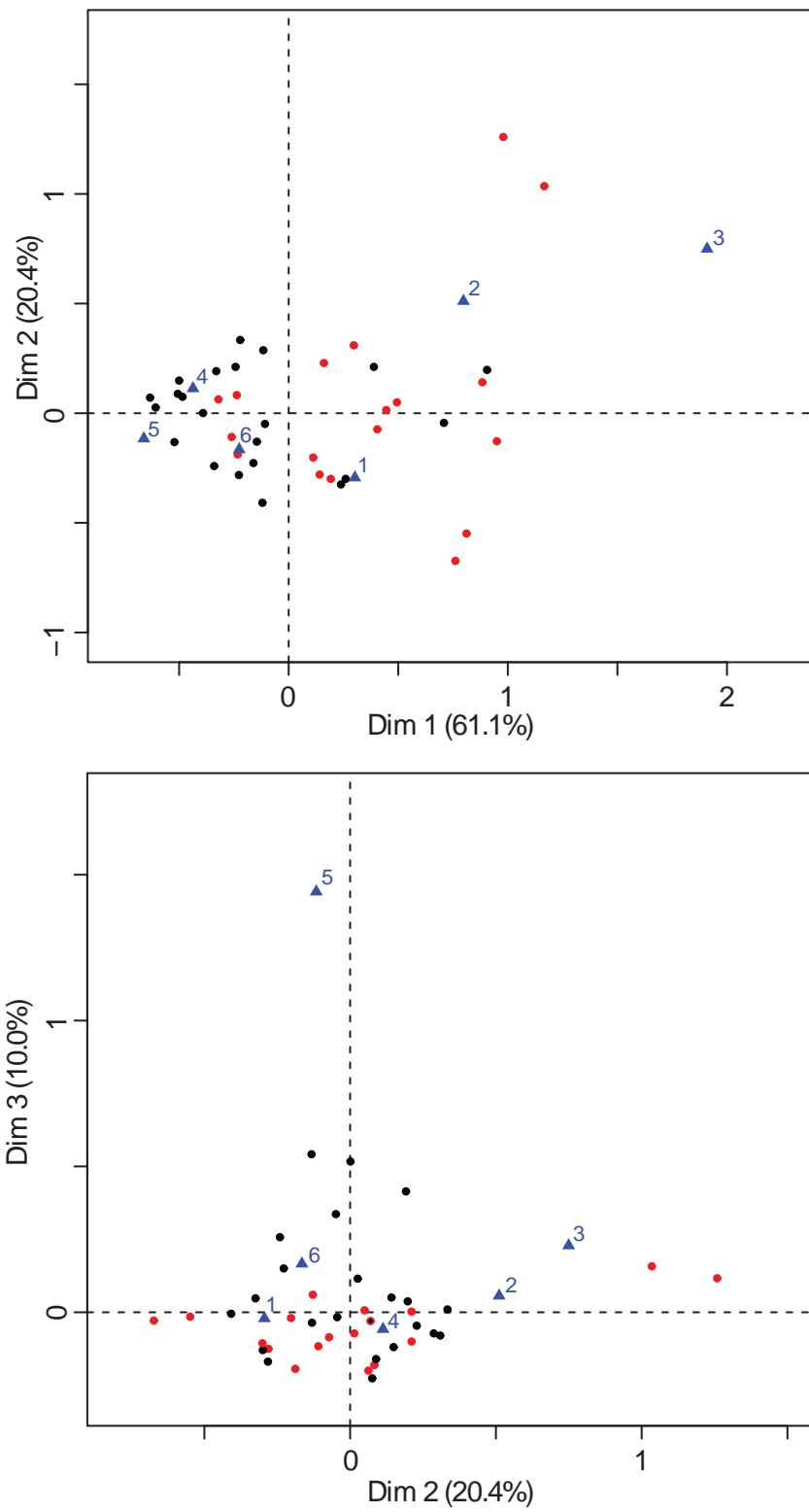
Supplementary Fig. S1 (continued). **E.** *N. indica* sp. nov. specimen no. NKTT1 from Tuticorin, India (RK). **F.** *N. indica* sp. nov. specimen no. NKTT2 from Tuticorin, India (RK). **G.** *N. indica* sp. nov. specimen no. NITT1 from Tuticorin, India, Dec. 2017 (APK). **H.** *N. indica* sp. nov. specimen no. NITT2 from Tuticorin, India, Dec. 2017 (APK); the spot patterns of this specimen were not scored, because of a dense cover of pale blotches masking the blue pigmentation.



NITT3

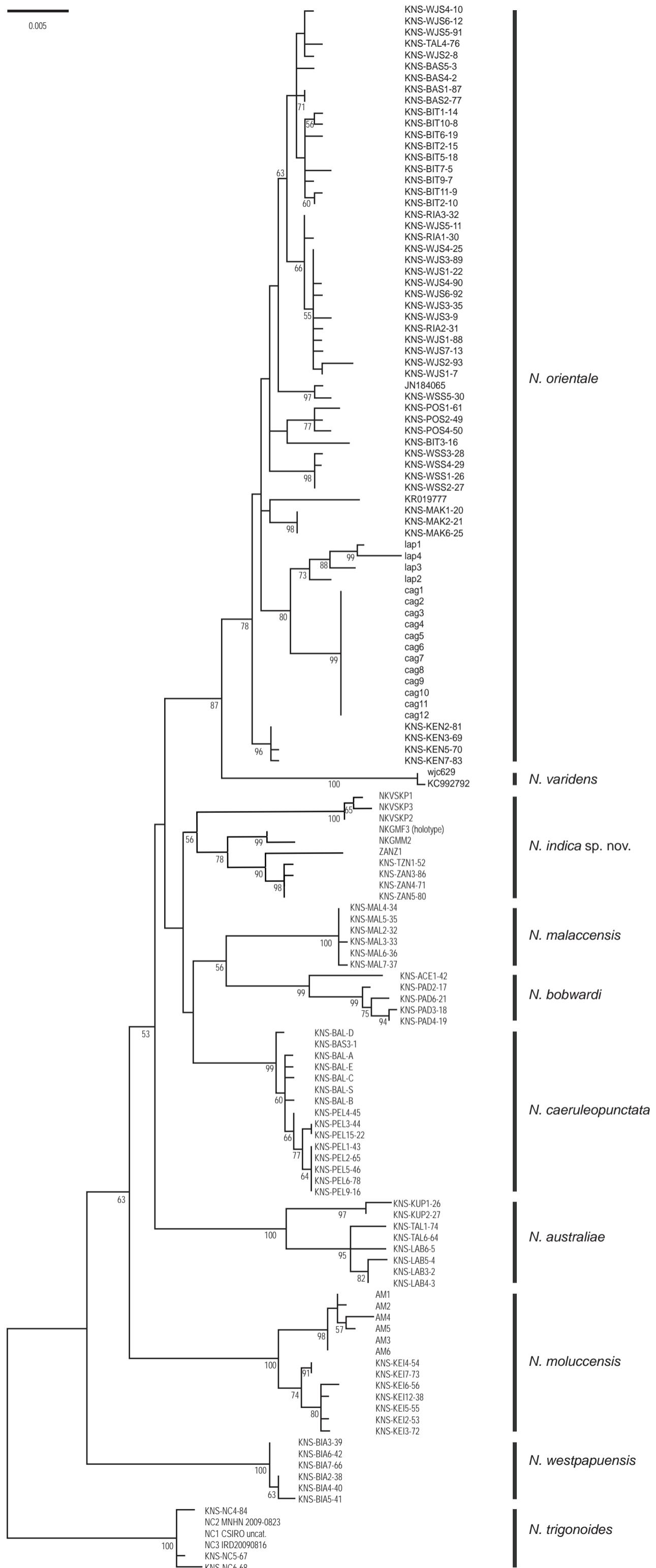


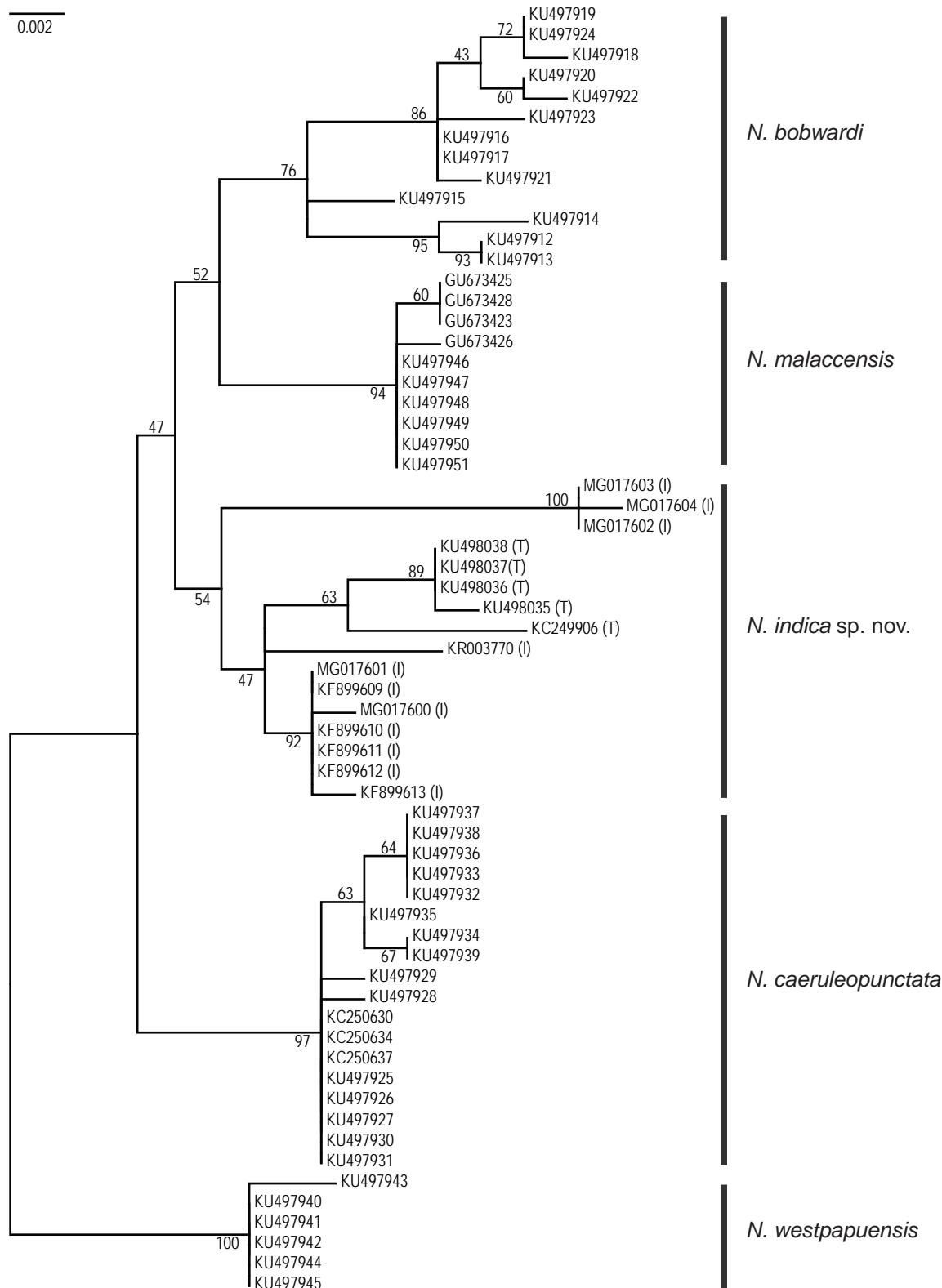
Supplementary Fig. S1 (continued). I. *N. indica* sp. nov. specimen no. NITT3 from Tuticorin, India, Dec. 2017 (APK). J. *N. indica* sp. nov. specimen no. IRD-20170720-A from Zanzibar, Tanzania, July 2017 (PB).



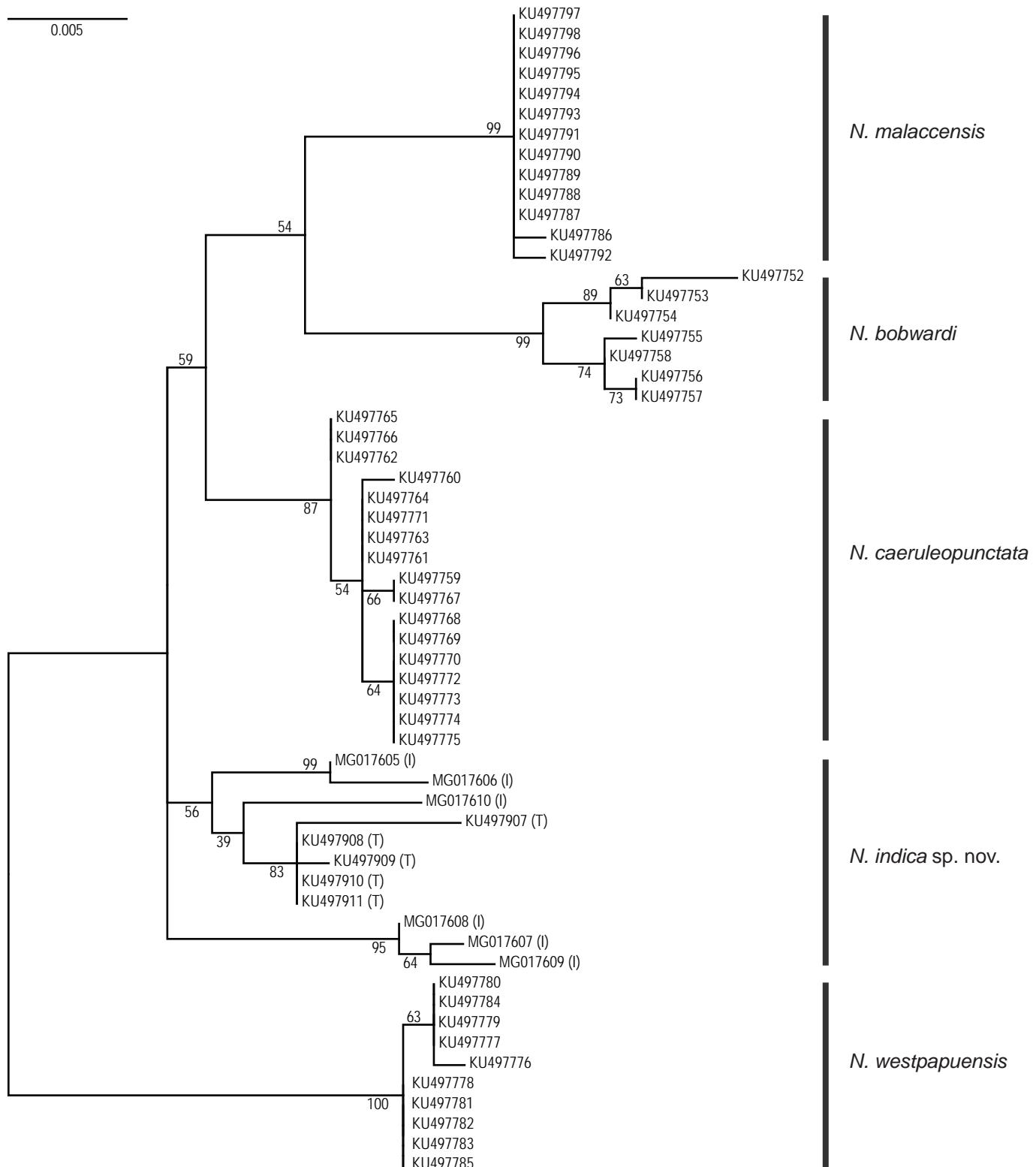
Supplementary Fig. S2. Correspondence analysis (CA): output of FactoMineR [Lê et al. 2008] representing the projection of individuals of the blue-spotted maskray species complex (*black circles*: *N. indica* sp. nov.; *red circles*: *N. bobwardi*, *N. caeruleopunctata*, *N. malaccensis*) along CA axes 1 and 2 (above) and CA axes 2 and 3 (below). Blue triangles indicate the position of the variables used to characterize spot patterns: 1. Small ocellated blue spots; 2. Medium-sized ocellated blue spots; 3. Large ocellated blue spots; 4. Dark speckles; 5. Dark spots; 6. Occipital mark

Supplementary Fig. S3. Maximum-likelihood tree of concatenated *CO1* + *cytochrome b* haplotypes in the blue-spotted maskray (*Neotrygon* spp.), rooted by *N. trigonoides*. The substitution model was TN93+G. Numbers at a node are bootstrap scores, from 600 bootstrap resampling runs under MEGA6.





Supplementary Fig. S1. Maximum-likelihood tree of *CO1* haplotypes in the Indian-Ocean blue-spotted maskray sub-group (*Neotrygon* spp.), rooted by *N. westpapuensis*. Nucleotide sequences were trimmed to a single core length of 638 bp and the dataset (63 sequences) was analyzed under MEGA6. The substitution model was K2+G. Numbers at a node are bootstrap scores, from 600 bootstrap resampling runs under MEGA6. *Neotrygon indica* sp. nov. specimens from India are labelled “(I)”; specimens from Tanzania are labelled “(T)”.

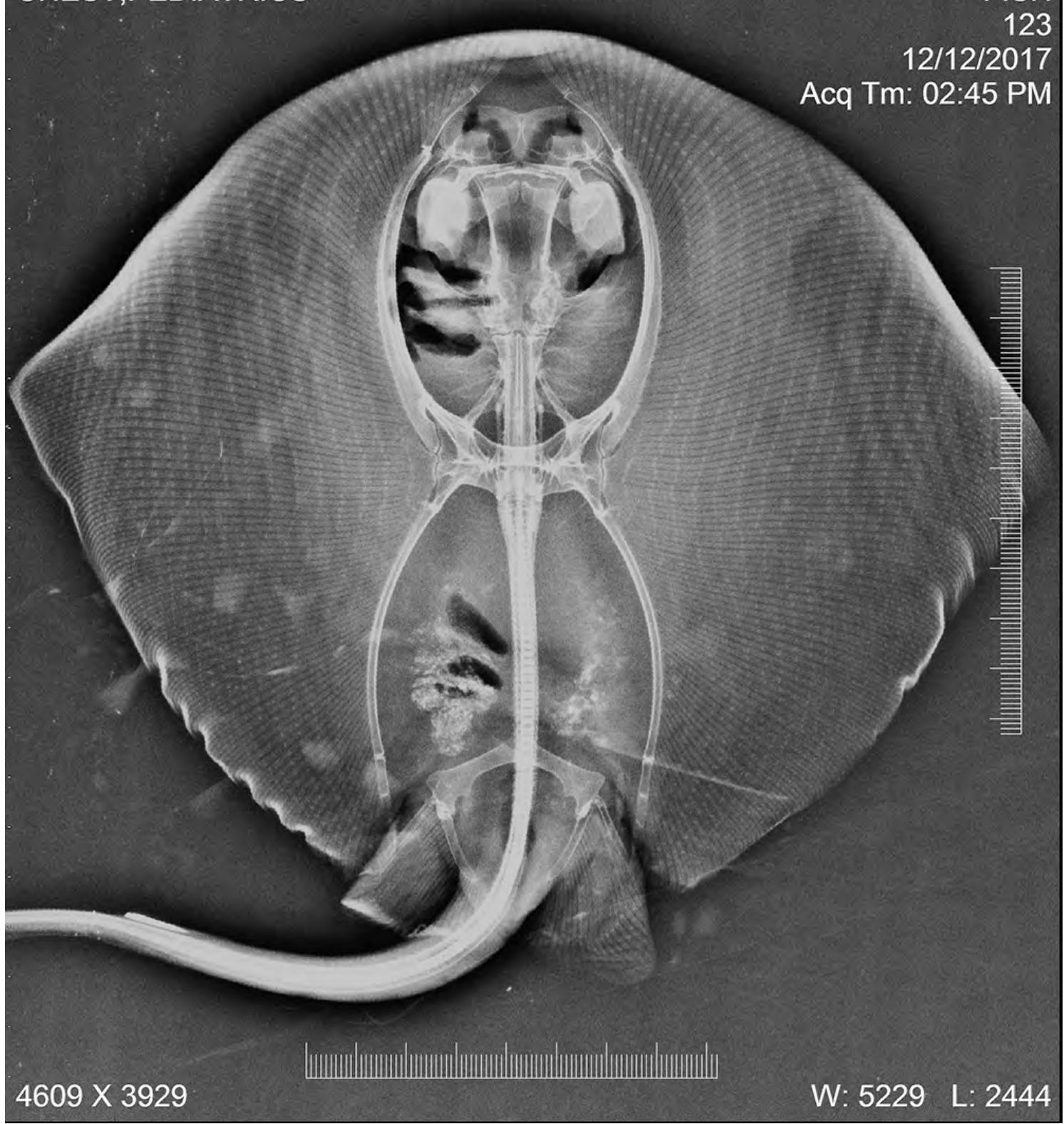


Supplementary Fig. S). Maximum-likelihood tree of *cytochrome-b* haplotypes in the Indian-Ocean blue-spotted maskray sub-group (*Neotrygon* spp.), rooted by *N. westpapuensis*. Nucleotide sequences were trimmed to a single core length of 795 bp and the dataset (58 sequences) was analyzed under MEGA6. The substitution model was TN93+G. Numbers at a node are bootstrap scores, from 600 bootstrap resampling runs under MEGA6. *Neotrygon indica* sp. nov. specimens from India are labelled “(I)”; specimens from Tanzania are labelled “(T)”.

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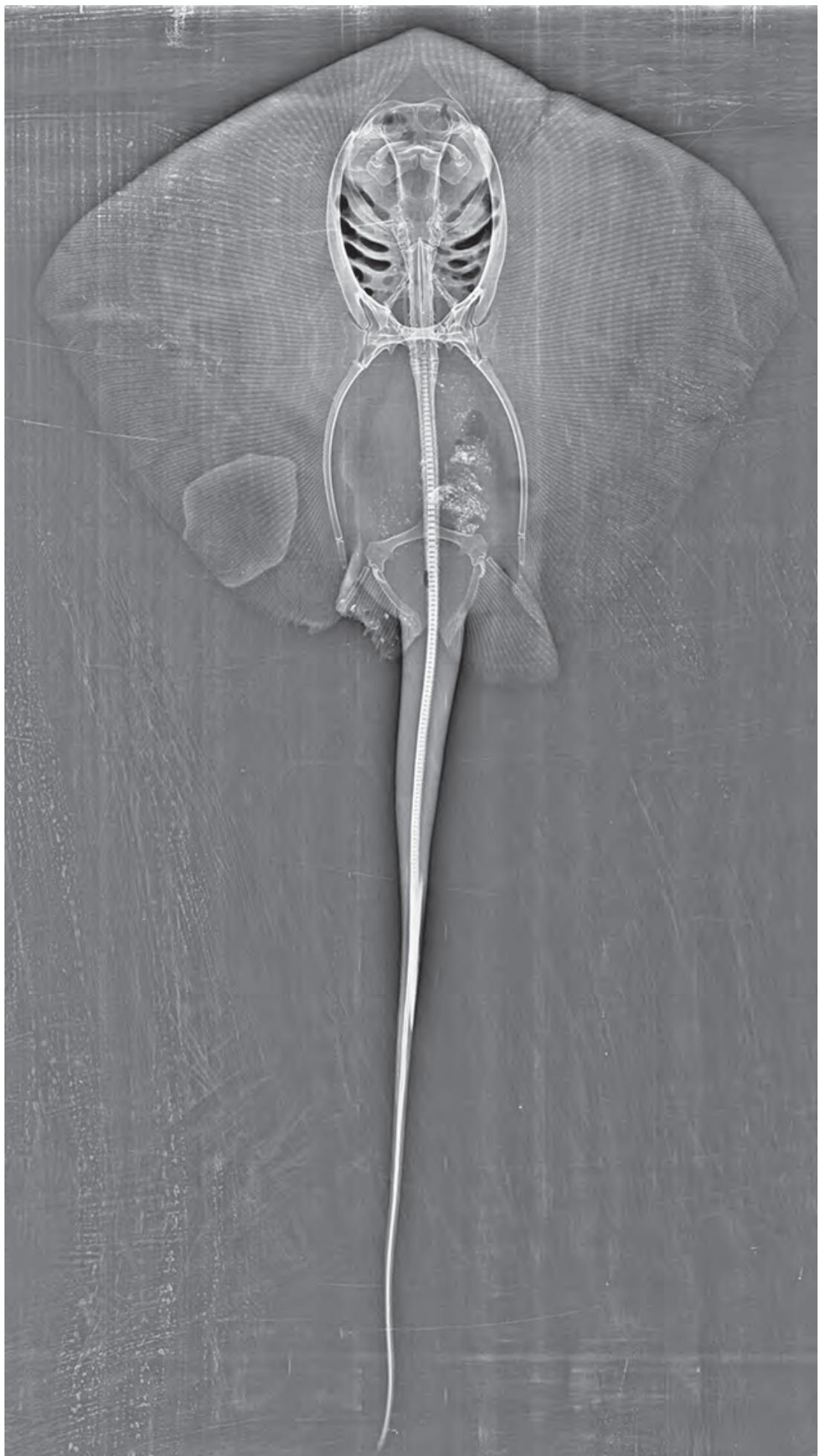
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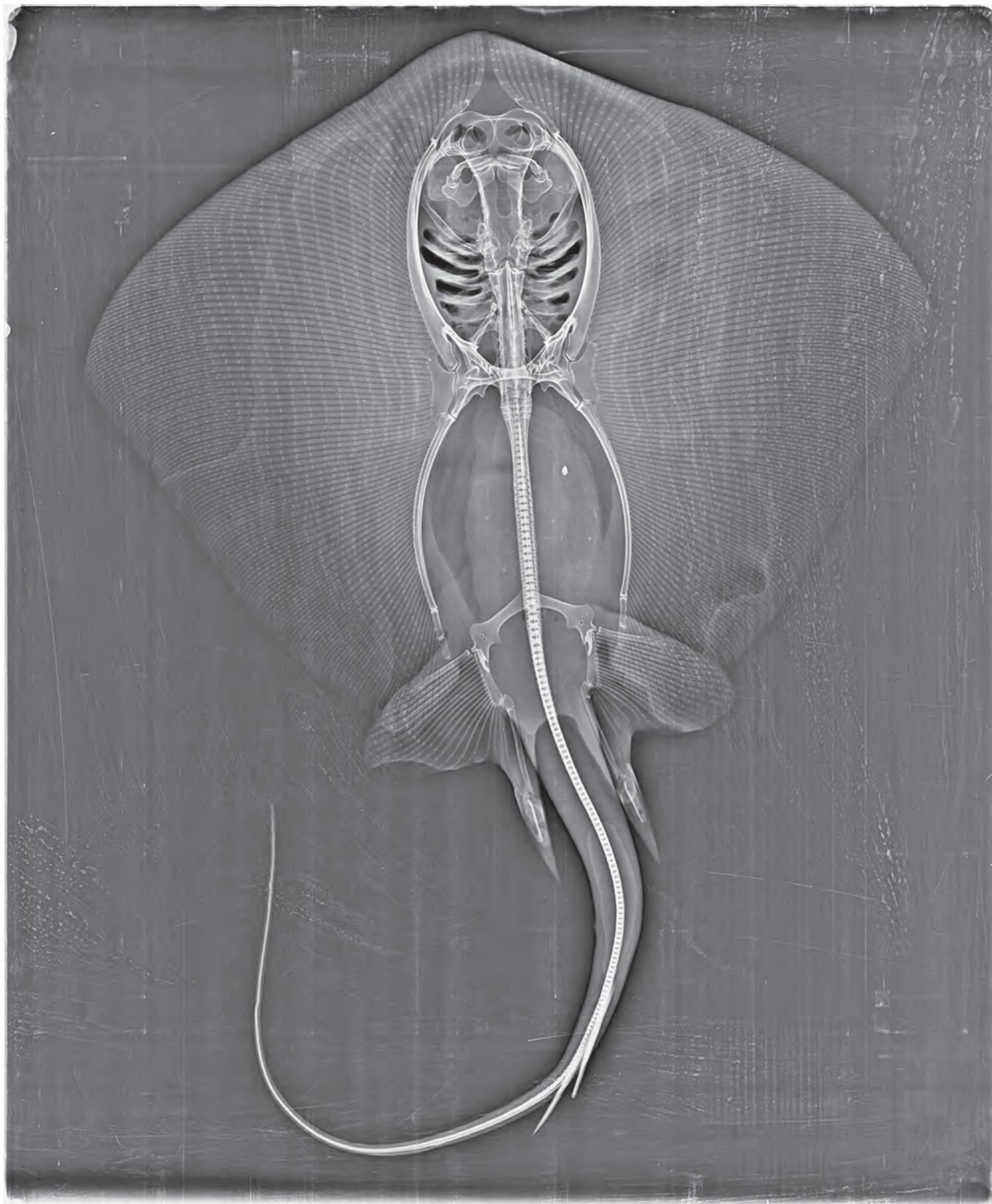
4609 X 3929

W: 5229 L: 2444

Supplementary Fig. S*. *Neotrygon indica* sp. nov. X-ray photograph of holotype, used for the count of pectoral-fin radials.



Supplementary Fig. S+'' *Neotrygon indica* sp. nov. X-ray photograph of paratype, used for the count of pectoral-fin radials.



Supplementary Fig. S. . *Neotrygon indica* sp. nov. X-ray photograph of specimen NITT1 from Tuticorin, India, used for the count of pectoral-fin radials. The number of pectoral-fin radials was 108-109 including propterygion 45-46, mesopterygion 14-15 and metapterygion 48-49.