

OPEN ACCESS

The Journal of Threatened Taxa is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) unless otherwise mentioned. JoTT allows unrestricted use of articles in any medium, reproduction, and distribution by providing adequate credit to the authors and the source of publication.



Journal of Threatened Taxa

Building evidence for conservation globally

www.threatenedtaxa.org

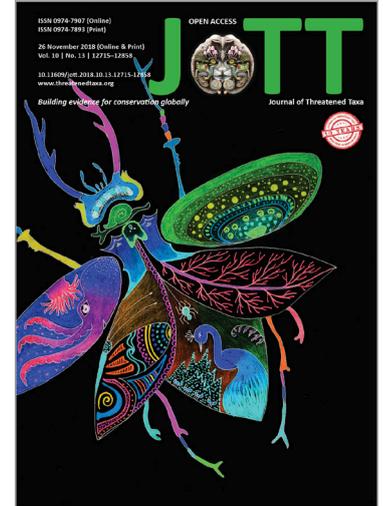
ISSN 0974-7907 (Online) | ISSN 0974-7893 (Print)

NOTE

A FIRST RECORD OF THE REDBELLY YELLOWTAIL FUSILIER *CAESIO CUNING* (BLOCH, 1791) (TELEOSTEI: CAESIONIDAE) FROM VISAKHAPATNAM COASTAL WATERS, INDIA

Muddula Krishna Naranji, Govinda Rao Velamala & Kondamudi Ramesh Babu

26 November 2018 | Vol. 10 | No. 13 | Pages: 12844–12846
10.11609/jott.3620.10.13.12844-12846



For Focus, Scope, Aims, Policies and Guidelines visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-0>
For Article Submission Guidelines visit <https://threatenedtaxa.org/index.php/JoTT/about/submissions#onlineSubmissions>
For Policies against Scientific Misconduct visit <https://threatenedtaxa.org/index.php/JoTT/about/editorialPolicies#custom-2>
For reprints contact info@threatenedtaxa.org

Partners



صندوق محمد بن زايد
للمحافظة على
الكائنات الحية
The Mohamed bin Zayed
SPECIES CONSERVATION FUND



zoo h!
ZÜRICH

Member



Publisher & Host





ISSN 0974-7907 (Online)
ISSN 0974-7893 (Print)

OPEN ACCESS



Caesio cuning (Bloch 1791), commonly known as the Redbelly Yellowtail Fusilier, belongs to the family Caesionidae (order Perciformes) which contains 23 species and four genera. This species is a non-migratory reef associated fish and distributed in the Indo-West Pacific region, from Sri Lanka to Vanuatu and from southern Japan to northern Australia (Carpenter 1988; Froese & Pauly 2016). The species of Caesionidae are characterized by a slender, fusiform and elongated body, unique jaw morphology, and highly protrusible upper jaw with reduced dentition (Carpenter 1987). The genus *Caesio* contains six species throughout the world, *Caesio caeruleaurea* (Lacepede, 1801), *C. cuning* (Bloch, 1791), *C. lunaris* (Cuvier, 1830), *C. teres* (Seale, 1906), *C. varilineata* (Carpenter, 1987), and *C. xanthonota* (Bleeker, 1853), and the former three species occur in Indian waters (Froese & Pauly 2016). From Indian waters Day (1958), Silas & Pillai (1982), Talwar & Kacker (1984), Padate et al. (2010), and Rao (2004) reported the occurrence of this species *Caesio cuning*; however, no occurrence of the genus *Caesio* has been reported from Visakhapatnam coastal waters, India. This paper reports the occurrence of *Caesio cuning* for the first time from the coastal waters of Visakhapatnam, Andhra Pradesh.

Material and Methods: A single specimen of *C. cuning* was collected from the Visakhapatnam coastal waters, India, on 22 June 2015. The material was fixed in 10% formalin and preserved in 70% ethanol. Identification was based on standard taxonomic keys of

A FIRST RECORD OF THE REDBELLY YELLOWTAIL FUSILIER *CAESIO CUNING* (BLOCH, 1791) (TELEOSTEI: CAESIONIDAE) FROM VISAKHAPATNAM COASTAL WATERS, INDIA

Muddula Krishna Naranji¹ , Govinda Rao Velamala² & Kondamudi Ramesh Babu³

^{1,2,3} Department of Marine Living Resources, College of Science and Technology, Andhra University, Visakhapatnam, Andhra Pradesh 530003, India

¹krishna.muddu217@gmail.com (corresponding author), ²govind.v.mlr@gmail.com, ³krameshmlr@gmail.com

Carpenter (1987) and Froese & Pauly (2016). Counts and measurements were made according to Allen (1985). The specimen was deposited at the Department of Marine Living Resources, Andhra University (DMLRAU52/2015).

Results and Discussion

Genus *Caesio* Lacepede, 1801
Caesio cuning (Bloch, 1791) (Image 1)
Telugu name: Dundava

Caesio Lacepede, 1801, pp. 85 (type species: *Caesio caeruleaurea* Lacepede, 1801, by subsequent designation (Bleeker, 1876).

Body moderately deep, dorsal profile of head high, interorbital space strongly convex, profile of snout relatively short and pointed; mouth small, oblique; the lower jaw slightly projecting, the posterior end of maxilla reaching to above front edge of orbit. Preopercular

DOI: <https://doi.org/10.11609/jott.3620.10.13.12844-12846> | ZooBank: urn:lsid:zoobank.org:pub:FE437990-9DA8-45AD-AFF8-0DD0B0AC7959

Editor: A. Biju Kumar, University of Kerala, Thiruvananthapuram, India.

Date of publication: 26 November 2018 (online & print)

Manuscript details: Ms # 3620 | Received 30 June 2017 | Final received 21 October 2018 | Finally accepted 01 November 2018

Citation: Naranji, M.K., G.R. Velamala & K.R. Babu (2018). A first record of the Redbelly Yellowtail Fusilier *Caesio cuning* (Bloch, 1791) (Teleostei: Caesionidae) from Visakhapatnam coastal waters, India. *Journal of Threatened Taxa* 10(13): 12844–12846; <https://doi.org/10.11609/jott.3620.10.13.12844-12846>

Copyright: © Naranji et al. 2018. Creative Commons Attribution 4.0 International License. JoTT allows unrestricted use of this article in any medium, reproduction and distribution by providing adequate credit to the authors and the source of publication.

Funding: None.

Competing interests: The authors declare no competing interests.

Acknowledgements: The authors are very much thankful to the Head, Marine Living Resources department, College of Science and Technology, Andhra University for providing facilities during the study period.



Table 1. Comparison of morphometric and meristic characters of *Caesio cuning*

	Dorsal	Anal	Pectoral	Ventral	Caudal	GR	Lateral line scales	Lateral transverse scales
Day 1875	X,15	III,11	20	I,5	17	-	-	-
Carpenter 1987	X,15	III,11	-	-	-	-	47-52	-
Rao 2004	X,15	III,11	18-19	I,5	-	-	45-51	-
Padate et al. 2010	X, 15	III,11	17	I,5	-2	-	48-51	-
Froese & Pauly 2016	X,14-16	III,10-12	17-20	I,5	-	35-40	45-51	7-9/15-18
Current specimen	X,15	III,12	17	I,5	17	-	54	8/16

**Image 1. *Caesio cuning* (Bloch, 1791) 240mm, TL; Visakhapatnam coast, Andhra Pradesh, India**

bone narrow and less than the eye diameter; eyes are relatively large in size. Villiform teeth in jaws; tongue without tooth; minute teeth in a triangular shaped patch of vomer and a narrow band on palatines. Preopercular flap slightly pointed. Head covered with ctenoid scales; originating from nape region and extending upto the base of the first dorsal spine. Transverse scale rows on cheek four.

Origin of dorsal and pelvic fin on the same line where as the origin of pectoral fin slightly anterior; dorsal fin continuous with ten spines and sixteen soft rays; fourth dorsal spine longest and succeeding spines decreasing length posteriorly. Dorsal fin rounded in shape slightly angular in shape posteriorly; anal fin with three spines; first anal spine shorter than second and second anal spine stouter and longer than third; pectoral pointed, it reaches up to the anterior margin of anus. Pelvic fin angular in shape; caudal fin forked. Body covered with ctenoid scales. Dorsal and anal fin with scaly sheath; lateral line runs parallel to dorsal profile; supra-temporal

band of scales confluent at dorsal midline.

Upper body bluish superiorly yellow, lower sides and the belly portion reddish in colour; dorsal fin posteriorly yellow, pectoral fin rays pinkish, pelvic and anal fins reddish in color; axil of pectoral fin black; caudal fin yellowish and iris red.

Remarks: Cuvier (1830) reconciled the colour differences between *C. erythrogaster* and the figure of Bloch's *cuning* as due to Bloch's incomplete information of the original colour (Carpenter 1987). When compared with the original description of previous authors (Bloch, 1791 and Carpenter, 1987). The meristic, morphometric and colouration were well in agreement with the present specimen (Tables 1 and 2) except lateral line scales. According to Carpenter (1987), Rao (2004), Padate et al. (2010), and Froese & Pauly (2016) lateral line scales are 47–52; 45–51; 48–51 and 45–51 respectively where as in the present study the lateral line scales are observed to be 54 only.

Table 2. Morphometrics of *Caesio cuning* [DMLRAU52/2015] collected from Visakhapatnam, India

	<i>C. cuning</i> , n = 1
Percentage of standard length	
Total Length	136.6mm
Body depth	48.88
Head length	30.00
Pre dorsal distance	42.22
Pre pectoral distance	27.77
Pre pelvic distance	29.44
Pre anal distance	65.55
Dorsal fin base	58.33
Pectoral fin base	6.66
Anal fin base	45.00
Depth of caudal peduncle	11.11
1 st Dorsal spine height	5.00
2 nd Dorsal spine height	12.77
3 rd Dorsal spine height	16.11
1 st dorsal ray length	11.66
2 nd dorsal ray length	12.22
1 st anal spine height	2.77
2 nd anal spine height	11.11
3 rd anal spine height	9.44
1 st soft anal ray length	10.00
4 th soft anal ray length	8.33
Last soft anal ray length	13.00
Pectoral length	33.88
Pelvic spine height	11.66
Soft pelvic length	19.44
Body width	20.00
Head width	31.00
% of head length	
Head depth	65.00
Head width	57.40
Eye diameter	25.92
Pre orbital distance	14.81
Post orbital distance	51.85
Inter orbital distance	29.62
Upper jaw length	33.33
Lower jaw length	22.22
Maxillary width	11.11
Snout length	20.37

References

- Allen, G.R. (1985).** FAO species catalogue. Vol. 6. Snappers of the World. An annotated and illustrated catalogue of lutjanid species known to date. *Food and Agriculture Organization Synopsis* 125(6): 208.
- Bloch, M.E. (1791).** *Naturgeschichte der Ausländischen Fische*. Berlin. Vol. 5: i-viii+152p+pls.253–288.
- Carpenter, K.E. (1987).** Revision of the Indo-Pacific fish family Caesionidae (Lutjanidae), with descriptions of five new species, Honolulu, Hawaii, Bishop Museum Press, no 15: 1–56pp.
- Carpenter, K.E. (1988).** Fusilier fishes of the world: an annotated and illustrated catalogue of Caesionid species known to date. Food and Agricultural Organization of the United Nations, Rome, 75pp.
- Day, F. (1958).** The fishes of India, being a natural history of the fishes known to inhabit the seas and freshwater of India, Burma and Ceylon. William Dawson and Sons Ltd., London, pp. 195–198.
- Froese, R. & D. Pauly (2016).** FishBase. World Wide Web electronic publication. <http://www.fishbase.org>.
- Padate, V.P., C.S.U. Rivonker & A.C. Anil (2010).** A note on the occurrence of reef inhabiting, red-bellied yellow tail fusilier, *Caesio cuning* from outside known geographical array. *Marine Biodiversity Records* 3: 6.
- Rao, D.V. (2004).** *Guide to Reef Fishes of Andaman and Nicobar Islands*. Zoological Survey of India, Kolkata, 555pp.
- Silas, E.G. & P.P. Pillai (1982).** Bait fishes Resources of tunas and related species and their fisheries in the Indian Ocean, *CMFRI Bulletin* 32: 136–140.
- Talwar, P.K. & R.K. Kacker (1984).** *Commercial sea fishes of India*. ZSI, Calcutta 997pp.





OPEN ACCESS



The Journal of Threatened Taxa is dedicated to building evidence for conservation globally by publishing peer-reviewed articles online every month at a reasonably rapid rate at www.threatenedtaxa.org. All articles published in JoTT are registered under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) unless otherwise mentioned. JoTT allows unrestricted use of articles in any medium, reproduction, and distribution by providing adequate credit to the authors and the source of publication.

ISSN 0974-7907 (Online); ISSN 0974-7893 (Print)

November 2018 | Vol. 10 | No. 13 | Pages: 12715–12858

Date of Publication: 26 November 2018 (Online & Print)

DOI: 10.11609/jott.2018.10.13.12715-12858

www.threatenedtaxa.org

Articles

The pattern of bird distribution along the elevation gradient of the Sutlej River basin, western Himalaya, India

-- Balraj Santhakumar, P. Ramachandran Arun, Ramapurath Kozhummal Sony, Maruthakutti Murugesan & Chinnasamy Ramesh, Pp. 12715–12725

Morphological variations in marine pufferfish and porcupinefish (Teleostei: Tetraodontiformes) from Tamil Nadu, southeastern coast of India

--K. Kaleshkumar, R. Rajaram, P. Purushothaman & G. Arun, Pp. 12726–12737

Communications

Possible range decline of Ganges River Dolphin *Platanista gangetica* (Mammalia: Cetartiodactyla: Platanistidae) in Indian Sundarban

-- Sangita Mitra & Mahua Roy Chowdhury, Pp. 12738–12748

Retrospective study on epidemiology of snakebites in Sarpang District, southern Bhutan

-- Bal Krishna Koirala, Jaganath Koirala & Sunil Sapkota, Pp. 12749–12754

Individual identification of *Duttaphrynus melanostictus* (Schneider, 1799) (Amphibia: Anura: Bufonidae) based on dorsal wart patterns

-- Uddalak Tathagato Bindhani & Abhijit Das, Pp. 12755–12768

A preliminary checklist of butterflies from the northern Eastern Ghats with notes on new and significant species records including three new reports for peninsular India

-- Rajkamal Goswami, Ovee Thorat, Vikram Aditya & Seena Narayanan Karimbunkara, Pp. 12769–12791

Aquatic and semi aquatic Hemiptera community of Sonebeel, the largest wetland of Assam, northeastern India

-- Anupama Saha & Susmita Gupta, Pp. 12792–12799

Short Communications

First record of colour aberration in Basra Reed Warbler *Acrocephalus griseldis* (Hartlaub, 1891) (Passeriformes: Acrocephalidae) from Central Marshes of southern Iraq, with notes on its intraspecific/interspecific behavior

-- Omar F. Al-Sheikhly, Mukhtar K. Haba, Nadheer A. Faza'a & Ra'ad H. Al-Asady, Pp. 12800–12804

Avian fauna of Amboli Ghat, Sindhadurg District, Maharashtra State, India

-- Varun Satose, Vikrant Choursiya, Rakesh Deulkar & Sasikumar Menon, Pp. 12805–12816

DNA barcoding and morphological characterization of moth *Antoculeora ornatisima* (Walker, 1858) (Lepidoptera: Noctuidae), a new range record from western Himalayan region of India

-- Twinkle Sinha, P.R. Shashank & Pratima Chaudhuri Chattopadhyay, Pp. 12817–12820

Partners



The Mohamed bin Zayed SPECIES CONSERVATION FUND



Odonata of eastern Bangladesh with three new records for the country
-- M. Kawsar Khan, Pp. 12821–12827

Two new species of phytoseid mites Euseius (Acari: Phytoseiidae) from Kerala, India

-- P.P. Santhosh, Mary Anithalatha Sadanandan & M.P. Rahul, Pp. 12828–12832

Notes

First photographic record of tiger presence at higher elevations of the Mishmi Hills in the Eastern Himalayan Biodiversity Hotspot, Arunachal Pradesh, India

-- Aisho Sharma Adhikarimayum & G.V. Gopi, Pp. 12833–12836

An old collection reveals an additional distribution record of the Greater Long-tongued Fruit Bat *Macroglossus sobrinus* K. Anderson, 1911 (Chiroptera: Pteropodidae) from southern West Bengal, India

-- Tauseef Hamid Dar, M. Kamalakannan, C. Venkatraman & Kailash Chandra, Pp. 12837–12839

Breeding reports and conservation implications of the Endangered Black-bellied Tern *Sterna acuticauda* J.E. Gray, 1831 (Aves: Charadriiformes: Laridae) in Odisha, eastern India

-- Tuhinansu Kar, Himanshu Shekhar Palei & Subrat Debata, Pp. 12840–12843

A first record of the Redbelly Yellowtail Fusilier *Caesio cuning* (Bloch, 1791) (Teleostei: Caesionidae) from Visakhapatnam coastal waters, India

-- Muddula Krishna Naranji, Govinda Rao Velamala & Kondamudi Ramesh Babu, Pp. 12844–12846

A record after 92 years, and a first report of the moth *Mecodina metagraptia* Hampson, 1926 (Lepidoptera: Erebiidae: Aganainae) from the Western Ghats' part of Maharashtra, India

-- Aparna Sureshchandra Kalawate, Pp. 12847–12849

A new record of the Malay Cardamom *Amomum aculeatum* Roxb. (Zingiberaceae) for mainland India

-- Sameer Chandrakant Patil & P. Lakshminarasimhan, Pp. 12850–12853

New distribution records of the leopard plants *Ligularia amplexicaulis* DC. and *Ligularia sibirica* (L.) Cass. (Asteraceae) in the Indian Himalaya

-- Bikarma Singh, Sumit Singh & Bishander Singh, Pp. 12854–12858

Miscellaneous

National Biodiversity Authority

Member



Publisher & Host

