

First Specimen-based Record of *Eumegistus illustris* Jordan and Jordan, 1922 (Perciformes: Bramidae) from Panay Island, Philippines

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Abstract

Two specimens of *Eumegistus illustris* (232.5 mm and 333.2 mm standard length), previously known from the Hawaiian Islands, south to New Caledonia, north to southern Japan, and including the Society and Marquesas Islands in the central and western Pacific Ocean were collected from Panay Island, central Philippines, and represent the first specimen-based records of the species in that area. In Philippine waters, *E. illustris* has been previously recorded from Samal Island, southern Philippines.

Introduction

The perciform family Bramidae includes 20 valid species (commonly called pomfrets) in seven genera, viz. *Brama*, *Eumegistus*, *Pteraclis*, *Pterycombus*, *Taractichthys*, *Taractes* and *Xenobrama*^{1–3}. *Eumegistus*, considered the most primitive genus, is characterized by a deep body, terminal mouth, convex frontal view, large body scales, naked snout and jaws, and scaly dorsal and anal fins^{4–5}. The genus includes two valid species, namely *E. brevorti* (Poey, 1860) and *E. illustris* Jordan and Jordan, 1922, the latter occurring in the Atlantic, Indian and Pacific oceans^{4,7}. The first Philippine record of *E. illustris* was collected off Samal Island, the largest island in Davao Gulf (located in the south-eastern Mindanao Islands)⁹. The present study reports the first specimen-based record from Panay Island, located in the western part of the Visayas Islands.

Materials and Methods

Counts and measurements followed Moteki⁶ and Moteki and Mundy¹⁰. Measurements were taken to the nearest 0.01 mm. using a digital caliper. Standard length is abbreviated as SL. Curatorial procedures followed Motomura and Ishikawa¹¹. Both specimens were deposited at Ichthyology Collection,

Museum of Natural Sciences, University of the Philippines Visayas, Miag-ao (UPVMI).

Eumegistus illustris Jordan and Jordan, 1922

Material examined: UPVMI 2395, 333.2 mm SL, purchased at Iloilo Central Market, Panay Island, J. Okamoto, June 25, 2018; UPVMI 2633, 232.5 mm SL, off Miag-ao, Panay Island, longline fishing, K. Barnuevo, 15 November 2018.

Description: Body large, compressed, relatively deep; deepest point at origin of dorsal fin; inter-pelvic area flat; belly ridges originating posteriorly from pelvic-fin bases. Head large, moderately deep; anterior profile rounded; frontal region arched; outer edge of operculum soft; maxilla broad; mandibles separate, exposing isthmus. Snout blunt, short. Mouth moderate size, superior, extending posteriorly below eye; upper lip close to anterior nares, separated from snout; jaws strong, oblique. Teeth on both jaws small, villiform, conical and sparsely arranged; small caniniform palatine teeth on smaller specimen (absent on larger specimen); tongue short. Eyes moderately large; interorbit narrow. Dorsal and anal fins single, firm, both with pronounced anterior rays.

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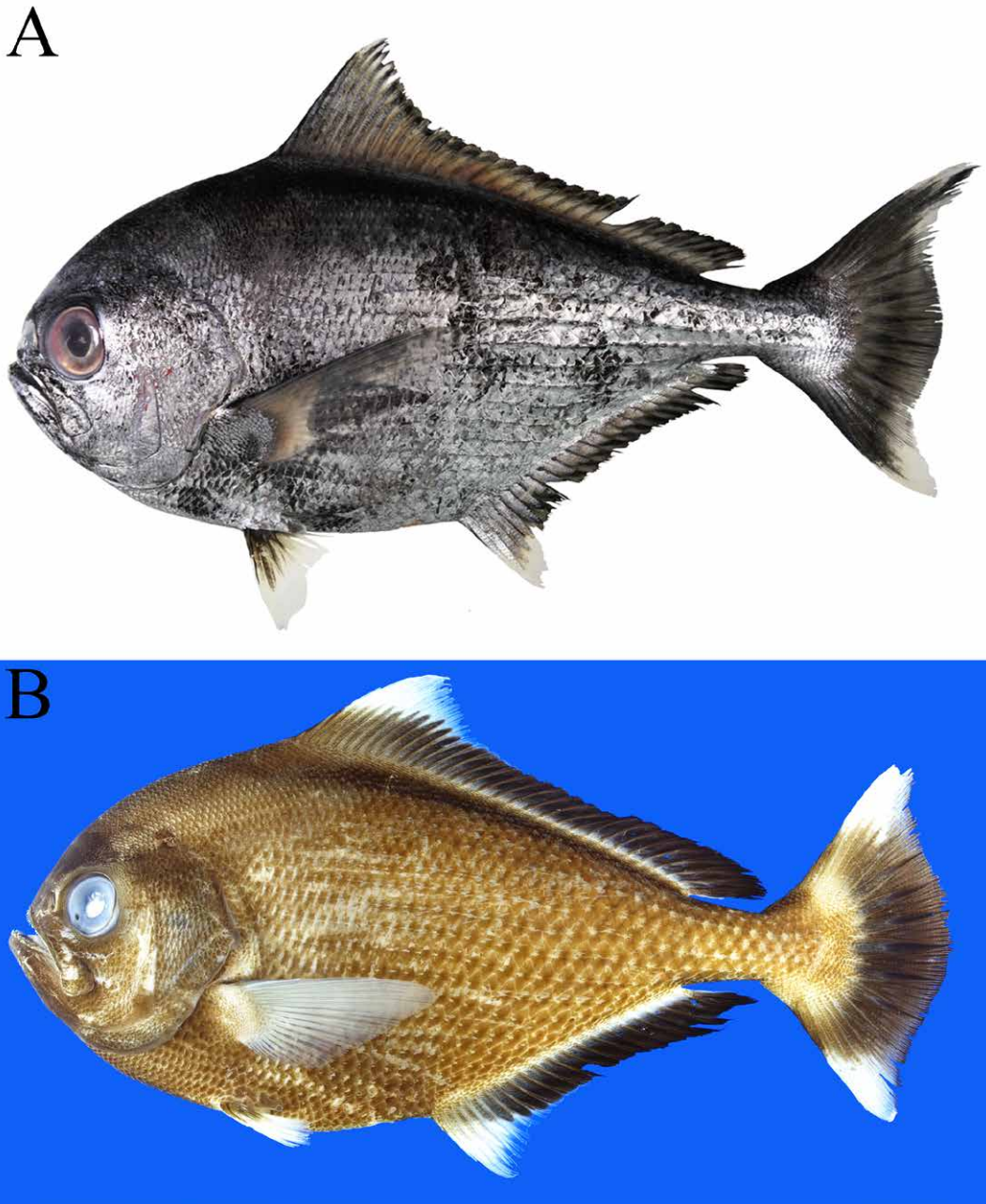


Fig. 1. Photographs of *Eumegistus illustris*. A: Fresh specimen (larger) UPVMI 2395, 333.2 mm SL, Iloilo Central Market, Panay Island (photo by Jo Okamoto); B: Preserved specimen (smaller) UPVMI 2633, 232.3 mm SL, Miag-ao, Panay Island (photo by Kyle Dominic E. Barnuevo).

Anterior and posterior rays of dorsal and anal fins of smaller specimen forming distinct lobes. Pelvic fins short, thoracic, inflexible. Pectoral fin large, extending well beyond anal-fin origin; base relatively close to opercular aperture, low on body. Caudal fin of smaller specimen rounded centrally, becoming slightly concave before short outer lobes; that of larger specimen with rounded central margin, thereafter, more strongly concave with more pronounced outer lobes. Caudal peduncle relatively slender.

Body scales ovate, irregularly sized, strongly attached over

entire body and hypural plate; with spines in smaller specimen (absent in larger specimen); scales above lateral line smaller than scales below; caudal peduncle with larger scales; snout and jaws smooth, lacking scales; maxilla and operculum with scales; pre-dorsal scales very small; dorsal- and anal-fin rays with scaly basal sheath; pectoral fin base covered with small scales.

Color when fresh (Fig. 1A): Body lustrous silver, darker dorsally and on slightly abraded areas. Anterior rays of dorsal and anal fins white distally, remainder of fins blackish except

for pale brownish (dorsal fin) and silver (anal fin) basal strips; caudal fin predominantly black, outer lobes white distally; pectoral fins pale, semi-translucent, brownish basally; pelvic fins broadly white distally, blackish basally.

Color when preserved (70% ethanol) (Fig. 1B): Body uniformly brown; nape dark; dorsal-, anal- and pectoral-fin bases white; pelvic-fin base brown-black; anterior dorsal- and anal-fin lobes white, remainder of fins black; pectoral fin translucent, white; pelvic fins predominantly white; caudal-fin central margin blackish, outer lobes strongly white distally.

Distribution: Widely distributed in the Atlantic Ocean⁴, Indian Ocean, and the western and central Pacific Ocean⁷⁻⁸,

including the Hawaiian Islands¹², Society and Marquesas Islands¹³, New Caledonia¹⁴, and Japan (Ogasawara Islands, Sagami Bay, Kii Channel, Tosa Bay, Kikai Island, Yoron Island, Okinawa Island, northeastern Okinawa Trough, and Kyushu-Palau Ridge)^{15,23}.

Remarks: The specimens were identified as *Eumegistus illustris* on the basis of the following characteristics: ovate body, broad maxillary, projecting lower jaw, thick and adhesive body scales, absence of caudal keels, and scale sheaths present on the dorsal- and anal-fin rays (see also descriptions of *E. illustris* given by Jordan and Jordan¹² and Last and Moteki⁵). In addition, meristic counts of the

Table 1. Counts and proportional measurements, expressed as percentage of standard length (SL), of *E. illustris* from Panay Island, Philippines.

	UPVMI 2633	UPVMI 2395
Standard length (mm)	232.3	333.2
Fork length (mm)	280.6	368.9
Counts		
Dorsal-fin rays	33	34
Anal-fin rays	24	23
Pectoral-fin rays	20	20
Pelvic-fin rays	1,5	1,5
Lateral-line scales	56	55
Scales above lateral line	12	12
Scales below lateral line	17	15
Pre-dorsal-fin scale rows	30	32
Gill rakers	9	10
Measurements (%SL)		
Body depth	49.9	47.7
Body width	13.9	13.8
Lateral length	78.3	76.5
Head length	29.0	29.5
Head depth	35.2	40.9
Head width	10.4	14.8
Snout length	5.7	7.5
Upper-jaw length	14.8	14.9
Lower-jaw length	12.6	13.2
Interorbital width	10.3	11.4
Orbit diameter (horizontal)	7.2	7.9
Orbit diameter (vertical)	8.0	8.6
Caudal-peduncle length	17.8	18.8
Caudal-peduncle length	9.1	5.7
Caudal central margin length	21.6	11.8
Pre-dorsal-fin length	39.3	30.9
Pre-anal-fin length	57.0	50.2
Pre-pectoral-fin length	28.8	26.0
Pre-pelvic-fin length	35.2	26.9
Dorsal-fin base	53.5	53.7
Anal-fin base	36.0	36.3
Pectoral-fin base	7.5	7.3
Pectoral-fin length	26.1	28.3

specimens examined here corresponded to those in Fourmanoir¹³, Fourmanoir and Rivaton¹⁴, Prut'ko⁷, Moteki⁶, and Bos and Gumanao⁹ viz. dorsal-fin rays 33 or 34, anal-fin rays 23 or 24, pectoral-fin rays 20, pre-dorsal-fin scale rows 30–32, and total gill rakers 9 or 10.

Eumegistus illustris was initially described by Jordan and Jordan¹² from a single specimen collected from the Honolulu market, Oahu Island, Hawaiian Islands. Subsequently, the species has been recorded from Guam¹⁶, the Kyushu-Palau Ridge and Tosa Bay¹⁷, Marianas Islands¹⁸, north of New Guinea¹⁹, Mascarene Island (Réunion)²⁰, Samal Island⁹, Taiwan^{21–22}, Amami Islands²³ and Kyoto, Japan²⁴. The present record from Panay Island, Philippines is the first specimen based-record from that locality.

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