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# STUDIA ECOLOGIAE ET BIOETHICAE



23/2 (2025)

## Occurrence of the Sickie Pomfret *Taractichthys steindachneri* (Döderlein, 1883) in Palawan Waters with Notes on Pomfret Fishery in the Philippines

Występowanie gatunku *Taractichthys steindachneri* (Döderlein, 1883) w wodach na wyspie Palawan oraz informacje na temat połowów ryb z rodziny Bramidae na Filipinach

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Received: 27 Jun, 2024; Revised: 28 Jan, 2025; Accepted: 14 Feb, 2025

**Abstract:** Deep-sea species, although bizarre and odd-looking organisms, also warrant scientific and conservation attention. However, information on their occurrence and fishery throughout their distribution remains limited, hindering the development of effective conservation strategies. This paper contributes to addressing this gap by providing information on the occurrence of Sickie Pomfret *Taractichthys steindachneri* (Döderlein, 1883) in Palawan waters and notes on pomfret fishery in the Philippines. Two individuals were encountered for sale at the Puerto Princesa City New Public Market on 26 February 2023 and were photographed alongside a size reference. Standard (SL) and total lengths (TL) were measured using CPCe software, revealing significant sizes – 538.1 mm SL and 683.6 mm TL for the first individual, and 574.0 mm SL and 741.1 mm TL for the second, exceeding the previously recorded maximum lengths. Molecular sequencing further validated the species' identity. Although seldom observed in the markets, the species are caught in deep trenches of the Sulu and West Philippine seas. In total, eight pomfret species are recorded in the Philippines, however, comprehensive information on the catch volume, fishing grounds, and other biological attributes of these species are needed to promote sustainable utilization and management.

**Keywords:** Bramidae, bony fish, deep-sea species, fish diversity

**Streszczenie:** Przy całym swoim dość dziwnym wyglądem, gatunki głębinowe, warte są uwagi naukowców i ochrony. Jednak informacje na temat ich występowania i połowów pozostają nadal ograniczone, co utrudnia opracowanie skutecznych strategii ochrony tych zwierząt. Niniejszy artykuł przyczynia się do wypełnienia tej luki, dostarczając informacje na temat występowania gatunku *Taractichthys steindachneri* (Döderlein, 1883) w wodach wokół wyspy Palawan oraz na temat połowów ryb z rodziny Bramidae na Filipinach. 26 lutego 2023, sfotografowano i opatrzone informacją o rozmiarach dwa osobniki wystawione na sprzedaż na targu w mieście Puerto Princesa. Standardową (SL) i całkowitą długość (TL) ryb zmierzono za pomocą oprogramowania CPCe. Uzyskane wartości, odpowiednio 538,1 mm SL i 683,6 mm TL dla pierwszego osobnika oraz 574,0 mm SL i 741,1 mm TL dla drugiego, przekroczyły dotychczas zarejestrowane maksymalne długości. Zastosowane metody genetyczne potwierdziły identyfikację gatunku. Chociaż rzadko spotykane na targach, gatunki z rodziny Bramidae są łowione w głębokich rowach mórz Sulu i Zachodnich Filipin. Ogółem na Filipinach odnotowano osiem

gatunków z rodziny Bramidae, jednak w celu zapewnienia zrównoważonego połowu i zarządzania potrzebne są szczegółowe informacje na temat wielkości połowów, łowisk oraz cech biologicznych tych gatunków.

**Słowa kluczowe:** Bramidae, ryby kostnoszkieletowe, gatunki głębinowe, różnorodność ryb

## Introduction

The family Bramidae Bonaparte 1831, commonly referred to as pomfrets, is an oceanic fish group distributed across the Atlantic, Indian, and Pacific oceans (Froese and Pauly 2024; Masuda et al. 1984; Motomura et al. 2017). They are comprised of 20 species scattered in seven genera (Gilbert et al. 2021) and may reach up to 1000 mm long (attained in *Taractichthys longipinnis*) (Froese and Pauly 2024). The family is characterized by a single dorsal fin, extending over the length of the body in some species, with unbranched anterior spines, and without anal spines (Froese and Pauly 2024; Gilbert et al. 2021).

Within the pomfret family, *Taractichthys* Mead and Maul, 1958 is comprised only of two highly migratory species: *Taractichthys longipinnis* (Lowe, 1843) which is predominantly found in the Atlantic Ocean at 0-500 m deep, and *Taractichthys steindachneri* (Doderlein, 1883) which is distributed in Indo-Pacific Ocean at depths of 50-700 m (Froese and Pauly 2024). In the Philippines, *T. steindachneri* was first reported in the Sulu Sea (Promjinda and Siriraksophon 2007) but provided little biological information. Several YouTube and Facebook videos showed pomfrets being caught in some parts of the country that look similar to *T. steindachneri* (e.g., JaySpot Fishing TV 2024; Pinoy Jigger TV 2024; Ralph Fishing and MOTO 2024), but the exact identities of the species need verification. The species was not reported anywhere since then, until recently, when Motomura et al. (2017) reported their presence in fish markets around Panay Island and Bemis et al. (2023) collected a sample from La Union for their DNA barcoding effort in the country.

The Palawan archipelago is renowned for its rich marine diversity, including 1,056

marine fish species (Balisco et al. 2023). Previous marine fish inventory studies in Palawan have primarily focused on a specific group of taxa (e.g., Pomacentridae – Villanueva et al. 2023), commercially important species (e.g., Gonzales 2013), common species caught by fishing gears (e.g., Balisco et al. 2019), and reef-dwelling species (e.g., Balisco and Dolorosa 2019). However, little to no attention has been given to deep-sea ecosystems and their inhabitants despite their scientific significance amidst threats from anthropogenic activities and changing climates (Robison 2009). The decline in ecosystem quality (Dolorosa et al. 2024; Climaco et al. 2023; Dolorosa et al. 2023; Tahiluddin and Sarri 2022; Fabro 2016; Licuanan et al. 2017) previously supporting progressive coastal fisheries has led to a gradual shift from shallow water into deep-sea fishing activities, uncovering new insights into the diverse deep-sea fish populations around Palawan.

While monitoring fish sold in a public market in Puerto Princesa City, we encountered samples of unusually large black fish identified as *T. steindachneri* constituting the first market record in Palawan. Herein, we also present the first molecular sequence of a Palawan specimen and offer insights into pomfret fisheries in the Philippines, aiming to contribute information about this less-known deep-sea species.

## 1. Materials and Methods

### 1.1. Data Collection

Two individuals of unusual, black-colored fish were seen displayed in one of the fish stalls of Puerto Princesa City New Public Market (PPCNPM) in Palawan, Philippines on 26 February 2023 (Figure 1). According to the fish vendor, the fish were caught using





Figure 1. A photograph of one of the two unusual black fish (741.1 mm TL) displayed for sale in Puerto Princesa City Public Market, Palawan, Philippines. Note: A Philippine peso coin is used as a size reference. (Photo by R.G. Dolorosa)

a long line somewhere in the northern part of Palawan. The specimens were photographed alongside a size reference and their sizes (standard length, SL; total length, TL) were estimated using the Coral Point Count with Excel extensions (CPCe) program (Kohler and Gill 2006). Additional information was obtained from the fish vendor, and a fin clip from one of the samples was collected, preserved in 95% ethanol, and frozen at  $-20^{\circ}\text{C}$  before DNA extraction.

Information about its fishery in the Philippines were obtained from the Key Informants (KIs) composed of fish vendors in the PPCNPM, and eight other personal contacts of the authors who provided information about the capture or sale of the pomfrets in their locality. The names of the seven KIs who provided information through personal messages were withheld for privacy purposes. Social media posts on FaceBook (<https://www.facebook.com>) and YouTube (<https://www.youtube.com>) were searched to document the extent of pomfret fishery in the country. Keywords such as “pomfret”, “Black Pomfret”, “Pacific Pomfret”, “Isdang Tabas”, and “Tabas-tabas” were used when searching for related videos. In total, 13

FaceBook and 17 YouTube posts were found (Appendix).

## 1.2. Data Analysis

DNA extraction was conducted using a GeneMark DNA Purification Kit following the manufacturer’s protocol (GMBio-lab, Taichung, Taiwan). The mitochondrial cytochrome c oxidase subunit I (*COI*) gene was amplified by polymerase chain reaction (PCR) using FishF1 and FishR1 primers (Ward et al. 2005). The PCR thermal cycling conditions, quality checking, PCR product purification, and DNA sequencing followed the protocol used by Thu et al. (2019). The *COI* sequence was compared to sequences from GenBank (Clark et al. 2016; [www.ncbi.nlm.nih.gov/genbank](http://www.ncbi.nlm.nih.gov/genbank)), assembled and examined using Molecular Evolutionary Genetics Analysis (MEGA version 11) software (Tamura et al. 2021), and used to build a maximum likelihood (ML) tree using the HKY+  $\Gamma$  model (best-fit model using ‘Find Best DNA/Protein models’) with 1,000 bootstrap iterations (Felsenstein 1985). The photos were used for the initial identification of the samples based on morphological characters, while confirmation

of the species was conducted using the *COI* sequence.

Information obtained from social media posts and KIs were visually presented on a map to show the distribution and occurrence of pomfret fishery in the Philippines. Data gathered were further supported and confirmed with literatures, including the works of Bos and Gumanao (2013), Fortaleza et al. (2024), Ganaden and Lavapie-Gonzales (1999), Motomura et al. (2017), and Promjinda and Siriraksophon (2007).

## 2. Results and Discussion

### 2.1. Species Identification

Two individuals encountered in PPCNPM exhibit distinctive characteristics that we have not previously observed. Based on the photos taken, the specimens have a black coloration and predominantly large, hard-to-remove scales covering their bodies, extending to the dorsal and anal fins. Their mouths are nearly vertical, with the upper jaw extending to a vertical through the anterior of the eye. Additionally, a white thick margin is also apparent in their caudal fin. The pelvic fin is small, with half of the anterior tip having a distinct white coloration (see also Masuda et al. 1984). The first individual measured 538.1 mm SL and 683.6 mm TL, while the second individual was larger at 574.0 mm SL and 741.1 mm TL. Both morphological characters and molecular sequences confirmed the species' identity as *Taractichthys steindachneri* (Döderlein 1883), belonging to the family Bramidae (Figures 1 and 2).

According to the fish vendor, the thick scales of this species require scraping before cutting, hence, locally called "*Tabas-tabas*" which means "to use a sharp knife to thinly scrape off the scales and skin". The fish vendor also mentioned that in addition to the sampled individuals, there were also 18 other individuals kept in an icebox, all weighing approximately 100 kg. Interestingly, no similar fish has been observed in the fish market since then. Nearshore fishing,

targeting shallow high-valued reef-dwelling and pelagic species remained popular in Palawan although deep-sea fishing has gradually gained attention recently. However, pomfrets continue to be regarded as bycatch and are not sold in the local market due to low market value, unattractive dark coloration, limited demand, and a lack of familiarity among the local consumers.

The description of our Palawan samples aligns with the species description provided by Masuda et al. (1984) and Shao (2024). The species, inhabiting the Indo-Pacific Oceans is known for its highly migratory behavior. The sizes of two individuals we observed (683.6 mm TL, and 741.1 mm TL) exceeded the maximum reported size for this species (600 mm TL) (Froese and Pauly 2024). However, Kindong et al. (2020) reported larger individuals reaching 920 mm forked length, suggesting high chances of capturing larger individuals in other fishing grounds within the country.

In Japan, the species has been reported to attain 600 mm SL and is distributed in Sagami Bay, Niigata Prefecture. The fish is widely found in the tropical and temperate areas of the Indo-Pacific region, except for the southeastern Pacific (Masuda et al. 1984; Nakabo 2013). Despite its widespread distribution, only Motomura et al. (2017) reported that juveniles are frequently caught in February around Panay Island. The species has not been previously mentioned in other literature on Philippines fishes, such as Herre (1953), Ganaden and Lavapie-Gonzales (1999), and Broad (2003). This indicates that deep-sea species were less exploited during those periods, resulting in little information about their occurrence and distribution in the country.

### 2.2. Pomfret Fisheries in the Philippines

Although seldomly displayed in the public markets in Puerto Princesa City, *T. steindachneri* is commonly sold in Negros Island, on the east side of the Sulu Sea. According to one of the KIs, the fish landed in Negros (Figure 3) are caught offshore using a baited

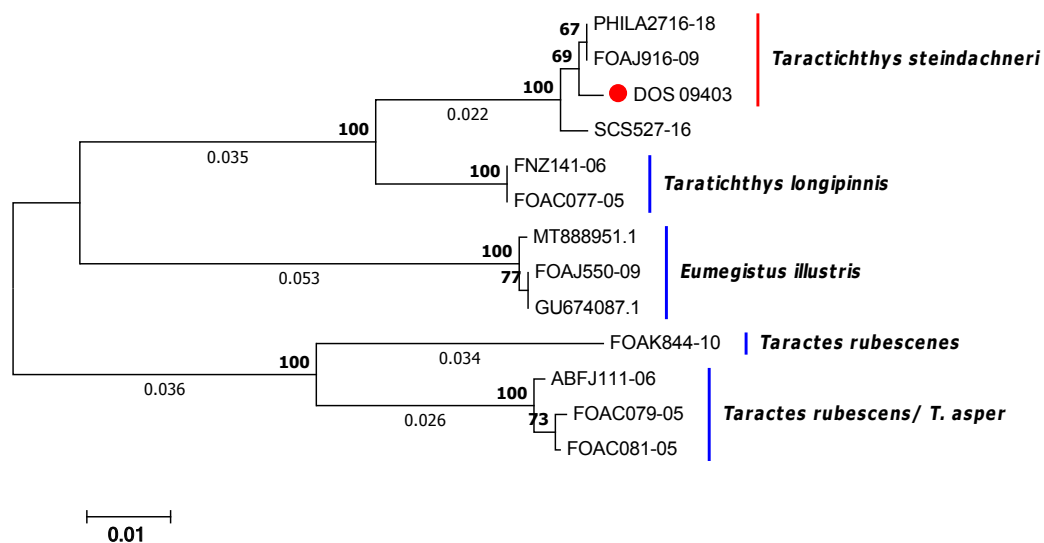


Figure 2. Unrooted maximum likelihood (ML) tree using partial *COI* sequences (565 bp) among the selected species of Bramidae. Numerals beside the internal branch are the bootstrap support using 1,000 iterations; values below 50 are not shown. Numerals beside long branches are genetic distances. Red circle represents the *Taractichthys steindachneri* collected from Puerto Princesa City New Public Market, Palawan, Philippines

long line in the West Philippine Sea (WPS) particularly on the western side of Mindoro Island and in the southeastern parts of the Sulu Sea (Figure 4). Fishing of this species is a year-round activity, except during unfavorable weather conditions. Individual fish caught may reach lengths of up to 700 mm and weigh between 3 and 10 kg each, fetching a local selling price of ₱160.00 per kilogram. Another KI showed a photo containing three individuals of *T. steindachneri* confiscated from a fishing boat apprehended in Tubbataha Reefs Natural Park (in the middle of the Sulu Sea) on April 13, 2024. In addition, a FaceBook post also showed one *T. steindachneri* caught between Panay and Guimaras Islands (Figure 4, Table 1).

The pomfret species in other uploaded photos and videos look different from *T. steindachneri*, instead, these resemble *Brama orcini* Cuvier, 1831 and *Eumegistus illustris* Jordan and Jordan, 1922, but these require actual examination of samples for further validation. The fishing grounds of *T. steindachneri* and other pomfret species

obtained from social media posts and correspondence from the KIs are shown in Figure 4. The posted videos and photos suggest a thriving small-scale pomfret fisheries all over the country, except in the northern and northeastern parts. Among the sites, Zambales had the highest number of posts and the greatest abundance of catch, likely due to the encouragement of the Philippine government to fish in the West Philippine Sea (Nepomuceno 2021).

Due to the abundance of reef fishes in Palawan, fishing activities are more concentrated on nearshore reef areas, thus records of deep-sea caught species are very rare, with reports primarily confined in the middle of the Sulu Sea, Zambales and the west coast of Borneo particularly in Brunei Darussalam waters (Promjinda and Siriraksophon 2007). In addition, Motomura et al. (2017) reported that juvenile *T. steindachneri* were frequently caught in February around Panay Island. The commercial capture of the species in WPS particularly on the western side of Mindoro Island, and





Figure 3. Sickle pomfrets *Taractichthys steindachneri* loaded in a truck (left) and displayed for sale in a village (right) in the Negros Island, Philippines. Note the small black pelvic fins with white color anteriorly. (Photos by Concepcion S. Paz)

Iloilo Strait further validated the known fishing ground of the species (Figure 4).

While there are plenty of online photos and videos of the captured pomfret species, information about which species are harvested from each locality is lacking. To confirm the identity of these species, there is a need to examine actual fish samples for morpho-meristic and molecular analyses. Aside from *T. steindachneri*, only a few studies have reported the presence of other seven pomfret species (Family Bramidae), thus, makes a total of eight species for the Philippines. For example, Bos and Gumanao (2013) found *Brama orcini* and *Eumegistus illustris* in a fish market in Samal Island in Davao Gulf, southern Mindanao. Of the 771 marine species in Southern Philippines recently reported by Fortaleza et al. (2024), 130 are deep reef inhabitants including three species of Bramidae, namely *Brama dussumiere*, *B. orcini* and *E. illustris* from Davao Del Sur and Davao City, suggesting that deep water fisheries in Davao Gulf have been active. Moreover, Ganaden and Lavapie-Gonzales

(1999) reported four species (*B. dussumiere*, *B. orcini*, *B. brama* and *B. japonica*) in different parts of the Philippines, including Manila, Albay, Camarines Iloilo, Cebu, Zamboanga, Cagayan de Oro City, and Misamis Oriental. Lastly, Motomura et al. 2017 reported four species (*Brama pauciradiata*, *B. dussumiere*, *Taractes rubescens* and *T. steindachneri*) found in the markets around Panay Island and one species (*B. orcini*) in a Samal Island fish market.

Pomfrets are widely distributed with nine species known to occur in Japan (Nakabo 2013) and eight species were recorded in Taiwan (Shao 2024), out of the 20 extant species recorded globally (Froese and Pauly 2024), suggesting that more species are possibly awaiting to be discovered within the Philippines waters.

Although Balisco et al. (2023) reported more than 1,056 marine fish species from Palawan, the list does not include any pomfrets (Bramidae). These species are characterized by their unconventional appearances, preference for deep water habitats,

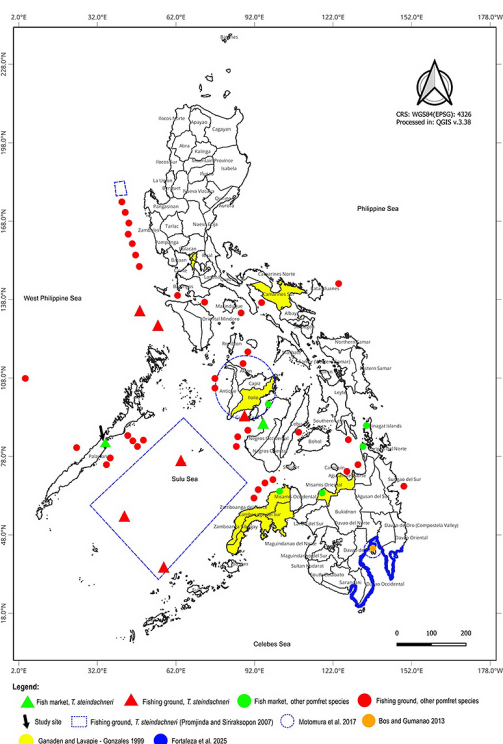


Figure 4. The updated fishing grounds of *Taractichthys steindachneri* and other pomfret species in the Philippines. (The map was generated using QGIS version 3.28)

and rarity in Palawan markets, likely due to their limited appeal to potential buyers. In contrast, a different scenario is observed on Negros Island where truckloads of *T. steindachneri* are frequently sighted, indicating that this species is regularly consumed on the island and in nearby areas.

Alongside the commercial deep-water fisheries, artisanal and recreational fishing which includes, among others, the capture of pomfret, is becoming a common activity in the Philippines as featured in the Facebook pages and groups (e.g., Pinoy Jigging TV 2024), JaySpot Fishing TV 2024) and Ralph Fishing and MOTO 2024). The ongoing deterioration of coastal resources (Climaco et al. 2022; Dolorosa et al. 2023; Dolorosa et al. 2024; Macusi et al. 2021) in the country and many parts of the world (Pomeroy et al. 2016) has forced these fishers to venture out farther places and deeper waters. However, unregulated deep-sea

fishing poses significant threats to the country's fragile deep-water ecosystems (Post et al. 2002; Flores 2004). This underscores the need for policies that prioritize conservation and sustainable utilization of deep-sea species and their habitats (Robison 2009).

Given the scarcity of information on *T. steindachneri* and other pomfret species in Philippine waters, further research into their biology, ecology, and distribution is imperative to inform both local and national policy-making. Determining size at first maturity is particularly crucial for establishing size limits and regulating fishing methods, which will help mitigate overfishing and protect fragile deep-sea ecosystems.

## Conclusion

In addition to *T. steindachneri*, other pomfret species are also caught particularly in the waters of Palawan and throughout



the Philippines. However, the precise species identification of the species remains uncertain and requires actual examination of specimens deposited in both local and national museums, clear photo-documentation, and, if possible, molecular analyses.

A thriving small-scale pomfret fishery, along with other meso-pelagic species, exists in most part of the country. This fishery requires monitoring to serve as a basis for the sustainable management of the deep-water fish fauna. The lack of information on pomfret fisheries in the northern and north-eastern regions of Luzon, and in the southern parts of Mindanao, particularly in the Celebes Sea, underscores the need for further investigation.

**Author Contribution:** Conceptualization, R.G.D. and R.A.T.B.; Methodology, R.G.D., R.A.T.B., A.S.Y. and J.U.O.; Formal Analysis, R.G.D. and R.A.T.B.; Investigation, R.G.D., R.A.T.B., A.S.Y. and J.U.O.; Writing – Original Draft Preparation, R.G.D.; Writing – Review & Editing, R.G.D., R.A.T.B., A.S.Y. and J.U.O.; Visualization, R.G.D. and R.A.T.B. All authors have read and agreed to the published version of the manuscript.

**Funding:** This study was partially funded by personal contributions for sample collection, with additional laboratory support provided by the Laboratory of Ichthyological Systematics and Evolution of the National Sun Yat-sen University, Taiwan for DNA sequencing.

**Conflict of Interest:** The founding sponsors had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, and in the decision to publish the results.

**Institutional Review Board Statement:** The collection of fin clip sample is covered by the Wildlife Gratuitous Permit No. 2023-02 issued by the Palawan Council for Sustainable Development.

**Acknowledgment:** Authors are grateful to Dr. Te-Yu Liao, the supervisor of the Laboratory of Ichthyological Systematics and Evolution of NSYSU, for providing laboratory support during DNA sequencing. Authors also want to thank the KIs for providing the needed information; Jovan A. Gimarangan for generating the map; and the anonymous reviewers for their comments and suggestions.

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**Appendix: Information obtained through social media about the pomfret fishery in the Philippines**

| Social Media            |                        |         | Location                                                        | Quantity (pcs) | Weight (kg) | Species                            | Date of Posting | Remarks                                                         | Link                                                                    |
|-------------------------|------------------------|---------|-----------------------------------------------------------------|----------------|-------------|------------------------------------|-----------------|-----------------------------------------------------------------|-------------------------------------------------------------------------|
| FB Messenger            | FB Posts               | YouTube |                                                                 |                |             |                                    |                 |                                                                 |                                                                         |
| Name withheld           |                        |         | Middle of Sulu Sea                                              | 3              |             | <i>Taractichthys steindachneri</i> | 13.kwi.24       | Confiscated from a fishing boat that entered a protected area   |                                                                         |
| Name withheld           |                        |         | Camia Bay, PPC, about 3 km from the shore)                      | 1              | 8           | other pomfret species              | 25.sty.24       | Eco-tourism fishing activity                                    |                                                                         |
| Name withheld           |                        |         | Dinagat Island                                                  |                |             | other pomfret species              | 2024            | Fish market                                                     |                                                                         |
|                         |                        |         | Surigao City                                                    |                |             | other pomfret species              | 2022            | Fish market                                                     |                                                                         |
| Name withheld           |                        |         | Aklan                                                           |                |             | other pomfret species              | 2022            | Fishing activity                                                |                                                                         |
|                         |                        |         | Naawan                                                          |                |             | other pomfret species              | 2021            | Fish market                                                     |                                                                         |
| Name withheld           |                        |         | Dipolog City                                                    |                |             | other pomfret species              | 2005            | Fish market, sold at PhP40-120/kg                               |                                                                         |
| Name withheld           |                        |         | Plaridel, Misamis Occidental                                    |                |             | other pomfret species              | 10.maj.24       | Fish market                                                     |                                                                         |
| Name withheld           |                        |         | Quezon Palawan                                                  |                |             | other pomfret species              |                 | Local consumption                                               |                                                                         |
| Palawan Fishing Buddies |                        |         | Lawak Island, Kalayaan Island Group                             | 1              |             | other pomfret species              | 3.kwi.23        | Fishing activity                                                |                                                                         |
|                         | Concepcion Paz         |         | West of Mindoro (Lubang and Sta Cruz); Sulu (Pangutaran Island) |                |             | <i>Taractichthys steindachneri</i> | 28.paz.21       | Large numbers; fish landing site in Hinobaan, Negros Occidental | <a href="https://tinyurl.com/4b9bb9cx">https://tinyurl.com/4b9bb9cx</a> |
|                         | Reve Española Lagunday |         | Iloilo Strait between Guimbal and Guimaras Island               | 1              |             | <i>Taractichthys steindachneri</i> | 26.kwi.24       | Fishing activity                                                | <a href="https://tinyurl.com/668tbfye">https://tinyurl.com/668tbfye</a> |

| FB Messenger | Social Media          |                                     | Location                                           | Quantity (pcs) | Weight (kg) | Species               | Date of Posting | Remarks                      | Link                                                                                                        |
|--------------|-----------------------|-------------------------------------|----------------------------------------------------|----------------|-------------|-----------------------|-----------------|------------------------------|-------------------------------------------------------------------------------------------------------------|
|              | FB Posts              | YouTube                             |                                                    |                |             |                       |                 |                              |                                                                                                             |
|              | Palawan Fishing Buddy |                                     | Puerto Princesa City                               | 4              |             | other pomfret species | 4.gru.24        | Eco-tourism fishing activity | <a href="https://tinyurl.com/4c7ajj7d">https://tinyurl.com/4c7ajj7d</a>                                     |
|              | Pobeng Probinsyana    |                                     | Antique                                            | 7              |             | other pomfret species | 8.maj.24        | Fishing activity             | <a href="https://tinyurl.com/3ejfnfnch">https://tinyurl.com/3ejfnfnch</a>                                   |
|              | Roy Jigging Vlog      |                                     | Southern Leyte                                     | 1              | 2.5         | other pomfret species | 28.kwi.24       | Weighing of fish             | <a href="https://tinyurl.com/5pkz25t">https://tinyurl.com/5pkz25t</a>                                       |
|              | Alvin Labrador        |                                     | Fishing area, Zambales                             | 16             |             | other pomfret species | 4.maj.24        | Fish landing site            | <a href="https://tinyurl.com/mr3f2ebm">https://tinyurl.com/mr3f2ebm</a>                                     |
|              | Khael Delos Santos    |                                     | Fishing, Zambales                                  | 19             |             | other pomfret species | 3.maj.24        | Fishing activity             | <a href="https://tinyurl.com/ydd2dhn7">https://tinyurl.com/ydd2dhn7</a>                                     |
|              | Gian Guanco           |                                     | Bacolod                                            | 5              |             | other pomfret species | 5.cze.21        | Fish landing site            | <a href="https://tinyurl.com/53knv2t9">https://tinyurl.com/53knv2t9</a>                                     |
|              | Emmanuel Pante        |                                     | San Andres, Catanduanes                            | 1              |             | other pomfret species | 28.gru.23       | Inside an ice chest          | <a href="https://tinyurl.com/4r2bae3s">https://tinyurl.com/4r2bae3s</a>                                     |
|              | Cleton Egbalic        |                                     | Zambales                                           | 2              |             | other pomfret species | 2024            | Fishing activity             | <a href="https://www.facebook.com/reel/810039590552733">https://www.facebook.com/reel/810039590552733</a>   |
|              | Bob Marley Villareal  |                                     | Cauayan Negros, (between Negros and Panay islands) | 2              |             | other pomfret species | 8.maj.24        | Fish landing site            | <a href="https://tinyurl.com/5577a43">https://tinyurl.com/5577a43</a>                                       |
|              | Rollan Andral Panopio |                                     | Puerto Galera Mindoro fishing ground               | 6              |             | other pomfret species | 19.kwi.24       | Fish landing site            | <a href="https://www.facebook.com/reel/399027032998668">https://www.facebook.com/reel/399027032998668</a>   |
|              | Peejay Soliman        |                                     | Pili Camarines Sur                                 |                | 6           | other pomfret species | mar.24          | Fishing activity             | <a href="https://www.facebook.com/reel/3629003544034652">https://www.facebook.com/reel/3629003544034652</a> |
|              |                       | Palawan Fishing Buddy by JJ Orqueza | Inagawan, PPC                                      | 1              | 6.3         | other pomfret species | 23.kwi.22       | Fishing tournament           | <a href="https://tinyurl.com/4wvs28jr">https://tinyurl.com/4wvs28jr</a>                                     |
|              |                       |                                     | Roxas                                              | 1              | 7.2         | other pomfret species | 7.lip.22        | Fish landing site            | <a href="https://www.youtube.com/watch?v=ojbbaEEDUc">https://www.youtube.com/watch?v=ojbbaEEDUc</a>         |

| Social Media |          |                         | Location                         | Quantity (pcs) | Weight (kg) | Species               | Date of Posting | Remarks           | Link                                                                                                                        |
|--------------|----------|-------------------------|----------------------------------|----------------|-------------|-----------------------|-----------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------|
| FB Messenger | FB Posts | YouTube                 |                                  |                |             |                       |                 |                   |                                                                                                                             |
|              |          |                         | Tinitian Roxas                   | 2              |             | other pomfret species | 31.maj.22       | Fishing activity  | <a href="https://www.youtube.com/watch?v=19Pu_XWq4AM&amp;t=261s">https://www.youtube.com/watch?v=19Pu_XWq4AM&amp;t=261s</a> |
|              |          | Rapoy Hermogino Fishing | Candelaria Zambales              | 3              |             | other pomfret species | 30.wrz.23       | Fishing activity  | <a href="https://www.youtube.com/shorts/lZeR7BJe8eg">https://www.youtube.com/shorts/lZeR7BJe8eg</a>                         |
|              |          |                         | Zambales                         | 12             |             | other pomfret species | 3.paź.23        | Fishing activity  | <a href="https://www.youtube.com/watch?v=PmZ1YYWL2l">https://www.youtube.com/watch?v=PmZ1YYWL2l</a>                         |
|              |          |                         | Zambales                         | 20             | 50          | other pomfret species | 9.paź.23        | Fish market       | <a href="https://www.youtube.com/watch?v=AwJNNMv5XJk">https://www.youtube.com/watch?v=AwJNNMv5XJk</a>                       |
|              |          | Manolo Reyes            | Pundaquit Zambales               | 2              |             | other pomfret species | paź.19          | Fishing activity  | <a href="https://www.youtube.com/watch?v=ck92lCFySBM">https://www.youtube.com/watch?v=ck92lCFySBM</a>                       |
|              |          | Ocean invader           | Lapu lapu Cebu                   | 2              |             | other pomfret species | 28.gru.22       | Fishing activity  | <a href="https://www.youtube.com/watch?v=wy0lOYDHtGU">https://www.youtube.com/watch?v=wy0lOYDHtGU</a>                       |
|              |          | Ji Seefoods KevZarTV    | Antique                          | 2              |             | other pomfret species | 7.lis.22        | Fish landing site | <a href="https://www.youtube.com/shorts/8nw64xVf3jo">https://www.youtube.com/shorts/8nw64xVf3jo</a>                         |
|              |          | Hanzach 521             | Negros Occidental                | 2              |             | other pomfret species | 9.maj.24        | Fishing activity  | <a href="https://www.youtube.com/shorts/ML9QioiWd7o">https://www.youtube.com/shorts/ML9QioiWd7o</a>                         |
|              |          | Kaon ta                 | Zamboanga del norte Dapitan City | 11             |             | other pomfret species | 31.gru.23       | Fish market       | <a href="https://www.youtube.com/shorts/f8p1oVnrNs0">https://www.youtube.com/shorts/f8p1oVnrNs0</a>                         |
|              |          | Jayspot fishing TV      | Cagwait Surigao del Sur          | 2              |             | other pomfret species | 20.wrz.20       | Fishing activity  | <a href="https://www.youtube.com/watch?v=briBvbS4WJc">https://www.youtube.com/watch?v=briBvbS4WJc</a>                       |
|              |          | Pinoy Jigger TV         | Butuan City                      | 3              |             | other pomfret species | 8.lip.19        | Fishing activity  | <a href="https://www.youtube.com/watch?v=WjE7CemO7aU">https://www.youtube.com/watch?v=WjE7CemO7aU</a>                       |
|              |          |                         | Butuan City                      | 1              | 7.5         | other pomfret species | 8.kwi.20        | Fishing activity  | <a href="https://www.youtube.com/watch?v=m667wAM2WTY">https://www.youtube.com/watch?v=m667wAM2WTY</a>                       |
|              |          | Ralph Fishing and MOTO  | Surigao                          | 1              |             | other pomfret species | 3.lip.22        | Fishing activity  | <a href="https://www.youtube.com/watch?v=loXcJdDofeI&amp;t=8s">https://www.youtube.com/watch?v=loXcJdDofeI&amp;t=8s</a>     |
|              |          | Richard Molina Fishing  | San Fernando, Romblon            | 1              |             | other pomfret species | 7.lut.20        | Fishing activity  | <a href="https://www.youtube.com/watch?v=VxNf5GIYG-k">https://www.youtube.com/watch?v=VxNf5GIYG-k</a>                       |



| FB Messenger | Social Media |                        | Location            | Quantity (pcs) | Weight (kg) | Species               | Date of Posting | Remarks                               | Link                                                                                                  |
|--------------|--------------|------------------------|---------------------|----------------|-------------|-----------------------|-----------------|---------------------------------------|-------------------------------------------------------------------------------------------------------|
|              | FB Posts     | YouTube                |                     |                |             |                       |                 |                                       |                                                                                                       |
|              |              | Boy Agwanta Vlogs      | Catanauan, Quezon   |                |             | other pomfret species | 16.paž.23       | Fishing activity, 1 ice chest         | <a href="https://www.youtube.com/watch?v=LXLYCzpNgAM">https://www.youtube.com/watch?v=LXLYCzpNgAM</a> |
|              |              | Katambok_TV            | Dipolog City        |                |             | other pomfret species | 20.cze.22       | Fish landing site, 3 ice chests       | <a href="https://www.youtube.com/watch?v=xZFaFlkJSaM">https://www.youtube.com/watch?v=xZFaFlkJSaM</a> |
|              |              | Dovelyns Channel       | Zamboanga del norte |                |             | other pomfret species | 3.maj.20        | Fishing activity, 70 kg (1 ice chest) | <a href="https://www.youtube.com/watch?v=x_FQtbj-it4">https://www.youtube.com/watch?v=x_FQtbj-it4</a> |
|              |              | Mark Gerald Fishing TV | Lobo Batangas       | 3              |             | other pomfret species | 18.kwi.23       | Fishing activity                      | <a href="https://www.youtube.com/shorts/Zey7HKeoXtk">https://www.youtube.com/shorts/Zey7HKeoXtk</a>   |
|              |              | J1 Seefoods KevZar TV  | Antique             | 3              |             | other pomfret species | 7.lis.22        | Fish landing site                     | <a href="https://www.youtube.com/shorts/8nw64xVf3jo">https://www.youtube.com/shorts/8nw64xVf3jo</a>   |
|              |              | Hanzachi521            | Negros Occidental   | 1              |             | other pomfret species | 9.maj.24        | Fishing activity                      | <a href="https://www.youtube.com/shorts/ML9QioIWd7o">https://www.youtube.com/shorts/ML9QioIWd7o</a>   |