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# First Record of *Mystus singaringan* from Bangka Island, Indonesia: A New Insight into Its Distribution

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**ABSTRACT**

*Mystus singaringan* (Bleeker, 1846), a species of freshwater bagrid catfish, is known to inhabit river systems across Southeast Asia. However, its presence on Bangka Island, Indonesia, has not been previously documented. This study reports the first confirmed record of *M. singaringan* from Bangka Island, expanding its known geographical range. Specimens were collected from a freshwater river using cast nets and identified based on morphological characteristics and meristic counts. Habitat features, including water parameters such as pH, temperature, and dissolved oxygen, were documented. This finding contributes to the understanding of freshwater fish diversity in Bangka Island and underscores the importance of further ichthyological surveys in the region. Conservation measures should be considered to ensure the sustainability of freshwater ecosystems, given increasing anthropogenic pressures.

## INTRODUCTION

The diversity and distribution of freshwater fish species in Southeast Asia have long been a subject of scientific interest, particularly in Indonesia, which harbors one of the richest ichthyofaunal assemblages in the world **(Hasan *et al.*, 2023a; Medrano, 2023)**. *Mystus singaringan* (Bleeker, 1846) is a bagrid catfish widely distributed in rivers and lakes across the Sunda Shelf, including Sumatra, Borneo, and the Malay Peninsula

**(Ng & Kottelat, 2013; Pramono *et al.*, 2019a; Hasan *et al.*, 2022)**. The species is characterized by an elongated body, four pairs of barbels, and a well-developed adipose fin, which distinguishes it from other *Mystus* species **(Ferraris, 2007)**. Despite its known presence in Sumatra and Borneo, there have been no confirmed records of *M. singaringan* on Bangka Island, a landmass situated between Sumatra and Borneo that has been largely understudied in terms of freshwater biodiversity.

Bangka Island's freshwater ecosystems are highly dynamic, influenced by monsoonal patterns and anthropogenic activities such as deforestation and tin mining **(Syarif *et al.*, 2022; Jatayu *et al.*, 2023; Kusumah *et al.*, 2023; Valen *et al.*, 2023)**. The absence of previous records of *M. singaringan* from this region may be attributed to a lack of comprehensive ichthyological surveys rather than the true absence of the species. Documenting its occurrence is essential for understanding species dispersal patterns, ecological requirements, and potential conservation concerns **(Hasan & Islamy, 2020; Syarif *et al.*, 2023; Hasan *et al.*, 2024)**.

This study presents the first confirmed record of *M. singaringan* from Bangka Island, based on field surveys conducted in January 2025. Specimens were collected from a freshwater river and identified using morphological and meristic analyses. The findings contribute to regional biodiversity knowledge and provide insights into the biogeographic distribution of *M. singaringan* within the Indonesian archipelago.

## MATERIALS AND METHODS

### 1. Study area

The study was conducted in a freshwater river system on Bangka Island, Indonesia, between Sumatra and Borneo. Bangka Island has a tropical climate with significant seasonal variations in rainfall, influencing river hydrology. The sampling sites were selected based on habitat suitability for freshwater fish, particularly *M. singaringan*, including areas with moderate water flow, muddy or sandy substrates, and aquatic vegetation. The geographical coordinates of the sampling locations were recorded using a GPS device.

### 2. Sampling methods

Field surveys were carried out on 11 January 2025, with fish specimens collected using various sampling techniques, including scoop nets and a fish trap. Sampling was conducted during both daytime and nighttime to account for potential diel activity patterns of *M. singaringan*. Environmental parameters such as water temperature (28°C), pH 5-6, and dissolved oxygen (4-5mg/ L), were measured *in situ* using a portable water quality meter.

### 3. Specimen identification

Collected specimens were preserved in 10% formalin **(Serdiati *et al.*, 2021)** for further analysis. Morphological identification was performed based on diagnostic

characteristics following the descriptions of **Ferraris (2007)** and **Ng and Kottelat (2013)**. The key identification criteria included: body shape and size, barbels (number and length) and coloration patterns. Meristic counts (fin rays, vertebrae, and lateral line scales) were recorded under a dissecting microscope. Specimens were later transferred to 70% ethanol for long-term preservation and deposited at the Bangka Belitung University Ichthyofauna Museum for future reference.

**4. Data analysis**

Morphometric measurements were taken using digital calipers (±0.01mm accuracy) and compared with published records of *M. singaringan* from other regions. Descriptive statistics were applied to analyze the variation in body proportions among the collected specimens.

## RESULTS

**1. New record**

INDONESIA – Bangka Island • Bangka District, Kace village; -2.163571136907756, 106.05707373788333 ; M. Ilmia leg.; scoop net; 1 ♂, 190 mm TL, BBIM 001

**Fig. 1.** *Mystus singaringan* (BBIM 001)

**2. Species identification**

A total of two specimens of *M. singaringan* were collected from Bangka Island during field surveys conducted in January, 2025. The specimens exhibited morphological characteristics consistent with the species descriptions provided by **Ng and Kottelat (2013)**. These included an elongated body, four pairs of barbels, a well-developed adipose fin, and a slightly forked caudal fin (Fig. 1). The body coloration ranged from silvery-gray to light brown, with darker pigmentation along the lateral line.

Meristic counts and morphometric measurements of the collected specimens are summarized in Table (1). The fin ray counts were as follows: dorsal fin (I, 7-8), pectoral

fin (I, 9-10), pelvic fin (I, 5-6), anal fin (iii, 10-12), and caudal fin (forked). The lateral line was continuous, with 32 scales counted along its length. Morphometric measurements, including total length (TL), standard length (SL) showed minor variations among specimens but remained within the expected range for *M. singaringan* populations in other regions.

**Table 1.** Meristic and morphometric characters of *M. singaringan*

| Meristic Characteristic | Present study | References |
|---|---|---|
| Total Lenght | 190 mm | 140-200 |
| Dorsal Fin Spines | I (one) | I (one) |
| Dorsal Fin Soft Rays | 7 | 6–7 |
| Pectoral Fin Spines | I (one) | I (one) |
| Pectoral Fin Soft Rays | 8 | 8–9 |
| Pelvic Fin Soft Rays | 6 | 6 |
| Anal Fin Soft Rays | 12 | 12–17 |
| Caudal Fin | Forked | Forked |
| Vertebrae | 35 | 35–39 |
| Barbels | 4 pairs (maxillary, nasal, inner and outer mandibular) | 4 pairs (maxillary, nasal, inner and outer mandibular) |

## 3. Habitat characteristics

The sampling site was characterized by moderate water flow, a muddy substrate, and scattered submerged vegetation (Fig. 2). The water temperature ranged from 24 to 32°C, pH was slightly acidic to neutral (4-6), and dissolved oxygen levels were moderate (5,5mg/ L), indicating a typical freshwater riverine environment.

**Fig. 2.** The habitat of *M. singaringan* in Bangka Island

## 4. Distribution

The collected specimens were compared with previously reported *M. singaringan* populations from Sumatra, Borneo and Java (Fig. 3). Morphometric variations were minor, suggesting intraspecific variation rather than the presence of a distinct subspecies. The presence of *M. singaringan* on Bangka Island fills a biogeographic gap between its known distributions in Sumatra and Borneo, supporting the hypothesis of historical connectivity between these landmasses during periods of lower sea levels **(Hasan *et al.*, 2023a; Syarif *et al.*, 2023)**.

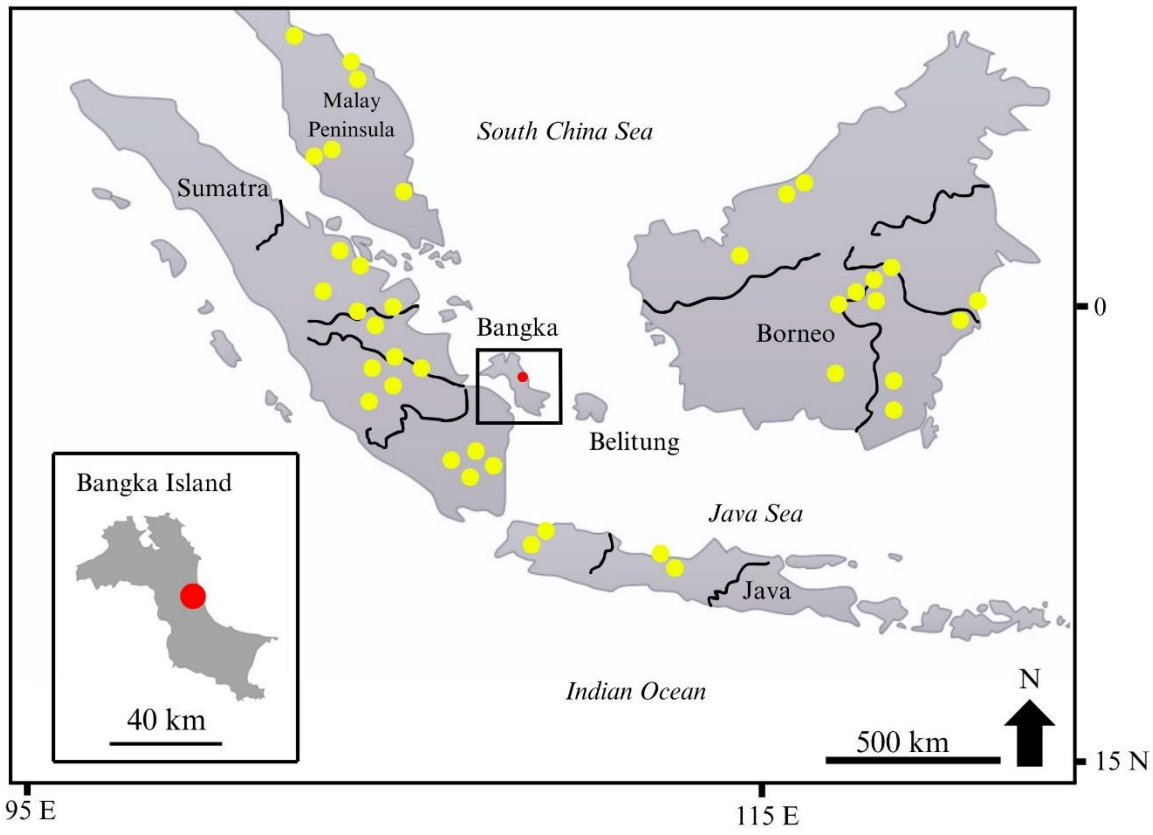


**Fig. 3.** Map of the known distribution of *M. singaringan*. New record in Bangka Island, Indonesia (red dot); published records (yellow dots)

## DISCUSSION

This study provides the first confirmed record of *Mystus singaringan* on Bangka Island, Indonesia, expanding the known distribution of this species. Previously, *M. singaringan* was documented in Sumatra, Borneo, and the Malay Peninsula **(Ferraris, 2007; Ng & Kottelat, 2013; Pramono *et al.*, 2019a; Hasan *et al.*, 2022)**, but its presence on Bangka Island had not been reported. The discovery suggests that the species may have a broader ecological tolerance than previously assumed, occupying a variety of freshwater habitats across its range **(Hasan *et al.*, 2020; Gausmann & Hasan, 2022; Hasan *et al.*, 2024)**.

The presence of *M. singaringan* on Bangka Island also raises important biogeographic questions **(Hasan *et al.*, 2022b)**. The island is located between Sumatra and Borneo, and its freshwater ichthyofauna is thought to share similarities with both regions due to historical land connections during the Pleistocene **(Voris, 2000; Robin *et al.*, 2022; Hasan *et al.*, 2023b)**. The occurrence of *M. singaringan* supports the hypothesis that freshwater fish species dispersed between these landmasses when sea

levels were lower, forming continuous riverine networks **(de Bruyn *et al.*, 2005; Robin *et al.*, 2023a; Syarif *et al.*, 2025a)**.

The habitat where *M. singaringan* was collected is characterized by moderate water flow, a muddy substrate, and submerged vegetation—conditions that are consistent with its known ecological preferences in Sumatra, Java and Borneo **(Pramono *et al.*, 2019b)**. The measured water parameters included pH (5-6), temperature (28°C), and dissolved oxygen (4-5 mg/L).

However, compared to previous studies, minor variations in morphometric measurements were observed among the Bangka Island specimens and those from other regions. Such differences may be attributed to local environmental factors, genetic diversity, or phenotypic plasticity **(Insani *et al.*, 2022; Nazran *et al.*, 2025)**. Further studies incorporating larger sample sizes and genetic analyses could provide deeper insights into the adaptability of *M. singaringan* across different habitats.

The discovery of *M. singaringan* on Bangka Island highlights the importance of continued ichthyological surveys in the region **(Ihwan *et al.*, 2020)**. Many freshwater species remain undocumented due to limited research efforts, and this first record suggests that other unreported species may inhabit Bangka Island's rivers **(Hasan *et al.*, 2023; Valen *et al.*, 2024a)**. Future studies should focus on conducting more extensive sampling across different river systems to assess species richness and distribution patterns.

From a conservation perspective, Bangka Island's freshwater ecosystems are increasingly threatened by anthropogenic activities such as tin mining activity, deforestation, and agricultural expansion such as palm oil plantations **(Martha *et al.*, 2019; Valen *et al.*, 2024b)**. These activities can lead to habitat degradation, water pollution, and sedimentation, all of which may negatively impact native fish populations.

Moreover, the introduction of invasive fish species into the freshwater ecosystems of Bangka Island poses a significant threat to the survival of native and endemic ichthyofauna **(Islamy *et al.*, 2025a)**. Species such as *Betta splendens* **(Valen *et al.*, 2023b)**, *Hemichromis elongatus* **(Insani *et al.*, 2024)**, *Pterygoplichthys pardalis* **(Ramadhanu *et al.*, 2024)**, *Xiphophorus helleri* **(Islamy *et al.*, 2025b)**, and *Gambusia affinis* **(Syarif *et al.*, 2025b)** typically exhibit high fecundity, broad ecological adaptability, and superior competitive advantages over indigenous species. These traits enable them to outcompete native fish for resources, dominate aquatic habitats, and even prey on the eggs and larvae of local species. Consequently, populations of native fish have declined markedly, raising concerns about potential local extinctions. This situation is particularly alarming in biodiversity-rich regions such as the Indonesian archipelago, where endemic species play a critical ecological role **(Robin *et al.*, 2023b)**.

The presence of *M. singaringan* in these rivers underscores the need for conservation initiatives to protect freshwater biodiversity on the island **(Valen *et al.*, 2024c)**. Implementing sustainable land-use practices and establishing conservation areas

for key freshwater habitats should be considered as part of long-term biodiversity management strategies.

While this study provides valuable baseline data, further research is needed to fully understand the ecological role and population dynamics of *M. singaringan* on Bangka Island. Key areas for future studies include: 1. Population genetics to determine whether the Bangka Island population is genetically distinct from those in Sumatra and Borneo **(Insani *et al.*, 2022; Valen *et al.*, 2022b)**; 2. Ecological interactions for investigating the trophic ecology and role of *M. singaringan* within the local freshwater ecosystem; and 3. threat assessments to evaluate the potential impacts of environmental changes and human activities on freshwater fish populations.

## CONCLUSION

This study presents the first confirmed record of *Mystus singaringan* from Bangka Island, Indonesia, expanding its known geographic distribution beyond Sumatra and Borneo. The presence of this species on the island supports the hypothesis of historical freshwater connectivity between these landmasses, likely influenced by lower sea levels during the Pleistocene. Morphological and meristic analyses confirmed the identity of the collected specimens, while habitat assessments indicated that *M. singaringan* can thrive in moderate-flow freshwater environments with muddy substrates and submerged vegetation. The discovery highlights the need for further ichthyological surveys on Bangka Island, as the region's freshwater biodiversity remains understudied. Given the increasing anthropogenic pressures on freshwater ecosystems—such as deforestation, tin mining, and agricultural expansion—conservation efforts should be prioritized to mitigate habitat degradation and ensure the sustainability of native fish populations. Future research should focus on population genetics, ecological interactions, and potential threats to *M. singaringan* and other freshwater species in the region. By enhancing our understanding of Bangka Island’s ichthyofauna, scientists and conservationists can develop more effective management strategies to preserve its unique aquatic biodiversity.

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## REFERENCES

**de Bruyn, M.; Wilson, J. A. and Mather, P. B.** (2005). Phylogeographic evidence for the Pleistocene and recent expansion of the freshwater fish Glossogobius celebius in Southeast Asia. Journal of Biogeography, 32(6): 983-994.

**Ferraris, C.J. Jr.** (2007). Checklist of catfishes, recent and fossil (Osteichthyes: Siluriformes), and catalogue of siluriform primary types. Zootaxa., 1418: 1-628.

**Gausmann, P. and Hasan, V.** (2022). New inland records of the bull shark *Carcharhinus leucas* from Sumatra, Indonesia. Marine and Fishery Sciences, 35(3), 437-444.

**Hasan, V. and Islam I.** 2020. First inland record of Bull shark *Carcharhinus leucas* (Müller & Henle, 1839) (Carcharhiniformes: Carcharhinidae) in Celebes, Indonesia. Ecologica Montenegrina., 38:12 – 17

**Hasan, V.; Swarlanda; Katz, A. M.; South, J.; Ottoni, F. P.; Nurjirana, and Gani, A.** (2023b). First record of the uncommon spiny eel *Mastacembelus notophthalmus* Roberts, 1989 (Synbranchiformes: Mastacembelidae) for Bangka Island, Indonesia. Cybium., 47(2): 189-191.

**Hasan, V.; Andraini, N.E.; Isroni, W.; Sari, L.A.; Nafisyah, A.L.; Dewi, N.N.; Putri, D.N.A.; Prasasti, T.A.B.; Ramadhani, A.A.; Daniel, K.; South, J.; Vieira, L.O.; Ottoni, F.P.; Maftuch; Faqih, A.R; Wirabuana, P.Y.A.P.; Tamam, M.B. and Valen, F.S.** (2023a). Fish diversity of the Bengawan Solo River estuary, East Java, Indonesia. Biodiversitas., 24(4): 2207-2216.

**Hasan, V.; Mamat, N.B.; South, J.; Ottoni, F.P.; Widodo, M.S.; Arisandi, P.; Isroni, W.; Jerikho, R.; Samitra, D.; Faqih, A.R.; Simanjuntak, C.P.H. and Mukti, A.T.** (2022a). A checklist of native freshwater fish from Brantas River, East Java, Indonesia. Biodiversitas., 23: 6031-6039

**Hasan, V.; Mukti, A.T. and Putranto, T.W.C.** (2019). Range expansion of the invasive Nile tilapia *oreochromis niloticus* (Perciformes: Cichlidae) in Java Sea and first record for Kangean Island, Madura, east Java, Indonesia. Ecology, Environment and Conservation, 25: S187-s189.

**Hasan, V.; South, J.; Katz, A.M. and Ottoni, F. P.** (2022b). First record of the Small-eyed loter *Prionobutis microps* (Weber, 1907) (Teleostei: Eleotridae: Butinae) in Java, Indonesia. Cybium., 46(1): 49-51.

**Hasan, V.; Widodo, M.S.; Faqih, A.;R.; Mahasri, G.; Arief, M.; Valen, F.S.; Tamam, M.B.; Yonarta, D.; Pratama, F.S. and Fitriadi, R.** (2020). Presence of striped flying barb *Esomus metallicus* (Teleostei, cyprinidae) from West Sumatra, Indonesia. Ecology, Environment and Conservation, 26: S73-S75.

**Ihwan.; Pratama, F.S.; Yonarta, D.; Faqih, A.R.; Widodo, M.S.; Valen, F.S.; Tamam, M.B. and Hasan, V.** (2020). Presence of asian catfish *Clarias batrachus* (Siluriformes, clariidae) in Madura Island, Indonesia. AACL Bioflux, 13(2): 958-962.

**Insani, L., Jatayu, D., Valen, F. S., Widodo, M. S., & Hasan, V.** (2022). Comparing genetic *Mystacoleucus marginatus* and *Mystacoleucus padangensis* (Cypriniformes: Cyprinidae) based on Cythochrome C Oxidase sub unit I (COI) gene. Iranian Journal of Ichthyology, 9(4): 195-203.

**Insani, L.; Jatayu, D.; Valen, F.S. and Hasan, V. (2024). First Record of the invasive Banded jewel cichlid *Hemichromis elongatus*** (Guichenot, 1861) (Teleostei: Cichlidae) on Bangka Island, Indonesia. IOP Conference Series: Earth and Environmental Science, 1392(1): 012030.

**Islamy, R.A.; Valen, F.S.; Alfian, R.A. and Hasan V.** (2025b). First Record of *Xiphophorus helleri* (Heckel, 1848) (Cyprinodontiformes: Poeciliidae) from the Bangka Island, Indonesia. Egyptian Journal of Aquatic Biology and Fisheries, 29 (2): 1055 – 1065.

**Islamy, R.A.; Valen, F.S.; Ramahdanu, D. and Hasan V.** (2025a). Presence of Midas Cichlid (*Amphilophus citrinellus* Günther, 1864) (Actinopterygii: Cichlidae) on Bangka Island, Indonesia: An Invasive Non-Native Species. Egyptian Journal of Aquatic Biology and Fisheries, 29 (2): 1045 – 1054.

**Jatayu, D.; Insani, L.; Valen, F.S.; Ramadhanu, D.; Hafidz, A.M.; Susilo, N.B.; Swarlanda,; Sabri, A.; Islamy, R.A.; Tamam, M.B. and Hasan, V.** (2023). Range expansion of Red devil cichlid *Amphylopus labiatus*, (Günther, 1864) (Actinopterygii: Cichlidae) in Bangka Island, Indonesia. IOP Conference Series: Earth and Environmental Science, 1267(1): 012100.

**Kusumah, W.; Hasan, V. and Samitra D.** (2023). Rediscovery of the Billiton Caecilian, Ichthyophis billitonensis Taylor, 1965, on Belitung Island, Indonesia, after more than five decades. Herpetology Notes, 16: 95 – 97

**Medrano, A.D.** (2023). Fish, Freshwater, and the Promise of Biodiversity History for Indonesian Studies. Forest and Society, 7(2): 435-449

**Nazran.;, Syofriani.; Ulfauza,; Valen, F.S., Oktaviandi, D.; Prayoga, A.; Ilmia, M.; Czech, m.; Kamarudin, A.S. and Hasan, V.** 2025. DNA Barcoding of Rasbora sp. from Bangka Island: A Genetic Identification Basis and Its Potential Application in Aquaculture. Egyptian Journal of Aquatic Biology and Fisheries, 29(3): 213-226

**Ng, H.H. and Kottelat, M.** (2013). Revision of the Asian catfish genus Mystus (Teleostei: Bagridae) in Southeast Asia. Ichthyological Exploration of Freshwaters, 24(2), 115–174.

**Pramono, T.B.; Arfiati, D.; Widodo, M.S. and Yanuhar U., (**2019a). Genetic characteristics of senggaringan fish (*Mystus singaringan*) from Klawing river, Brantas River and Thailand as the basis of conservation and domestication. AACL Bioflux, 12(4): 996-1004.

**Pramono, T.B.; Arfiati, D.; Widodo, M.S. and Yanuhar, U.** 2019b. Sexual dimorphism in morphometric characters of *Mystus singaringan* from Klawing River in Central Java, Indonesia: Strategic instruction for conservation development. Biodiversitas, 20: 1133-1139.

**Ramadhanu, D.; Tamam, M.B.; Valen, F.S. and Hasan, V.** (2024). New records of the Non-native Amazon sailfin catfish *Pterygoplichthys pardalis* (Castelnau, 1985) in Bangka Island Indonesia. IOP Conference Series: Earth and Environmental Science, 1392(1): 012021.

**Robin, R.; Valen, F.S., Ramadhanu, D.; Nomleni, A.; Turnip, G. and Insani, L.** (2023a). A new distributional record of flying barb, *Esomus metallicus* (Actinopterygii: Cyprinidae), from Kapalo Banda River, West Sumatra, Indonesia. International Journal of Aquatic Biology, 11(1), 59–68.

**Robin.; Valen, F.S.; Nomleni, A.; Turnip, G.; Luhulima, M.Y. and Insani L.** (2023b). Presence of non-native freshwater fish in Indonesia: A review-Risk and ecological impacts. AACL Bioflux, 16 (1): 66 - 79

**Robin.; Insani, L.; Swarlanda.; Prananda, M. and Valen, F.S.** (2022). Range extension of Spanner barbs, *Barbodes lateristriga* (Valenciennes, 1842) (Cypriniformes: Cyprinidae) to Bangka Island, Indonesia. Iranian Journal of Ichthyology, 9(3): 149–157.

**Serdiati, N.; Insani, L.; Safir, M.; Rukka, A.H.; Mangitung, S.F.; Valen, F.S.; Tamam, M.B. and Hasan V.** (2021). Range expansion of the invasive nile tilapia *Oreochromis niloticus* (Perciformes: Cichlidae) in sulawesi sea and first record for Sangihe Island, Tahuna, North Sulawesi, Indonesia. Ecology, Environment and Conservation, 27 (1), pp. 168 – 171

**Syarif, A.F.; Hafidz, A.M.; Valen, F.S.; Herjayanto, M. and Robin, R. (**2023a). A new distributional record of spanner barbs, *Striuntius lateristriga* (Valenciennes, 1842) (Cypriniformes: Cyprinidae) in Belitung Island, Indonesia. IOP Conf. Ser.: Earth Environ. Sci., 1289 012011.

**Syarif, A.F.; Kurniawan, A.; Kurniawan, A.; Robin, R. and Valen, F.S.** (2022). First genetic record and phylogenetic relationship of *Rasbora einthovenii* (Bleeker, 1851) (Cyprinidae : Danioninae) from Bangka Island, Indonesia. IOP Conf. Ser.: Earth Environ. Sci., 1260: 012002

**Syarif, A.F.; Valen, F.S.; Czech, M.; Islamy, R.A.; Hafidz, A.M.; Yusnandar F., Kamarudin A.S. and Hasan, V. (**2025b). The Existence of the Non-Native Western Mosquitofish *Gambusia affinis* (Baird & Girard, 1853) (Cyprinodontiformes: Poeciliidae) on Belitung Island, Indonesia. Egyptian Journal of Aquatic Biology and Fisheries, 29 (1): 2795 – 2804.

**Syarif, A.F.; Valen, F.S.; Kurniawan, A.; Rudiansyah.; Herjayanto, M.; Mamat, N.B.; Ottoni, F.P.; Andriyono, S. and Hasan, V.** (2025a). Unveiling the First DNA Barcoding of *Betta* cf. *uberis* Fish (Anabantiformes: Osphronemidae) from Belitung Island, Indonesia. Egyptian Journal of Aquatic Biology and Fisheries, 29(1): 2023-2036.

**Valen, F. S.; Alfian, R. A.; Prananda, M.; Hasmadi, M.; Gani, A. and Hasan, V.** (2024c). DNA Barcoding of the Endemic Freshwater Catfish *Encheloclarias tapeinopterus* (Bleeker, 1853) (Siluriformes:Clariidae) from Bangka Island, Indonesia. IOP Conference Series: Earth and Environmental Science, 1392(1): 012034.

**Valen, F. S.; Syaputra, D.; Mohd Hasmadi, I.; Swarlanda, Kamarudin, A. S.; Hasan, V. and Itaya, I.** (2024b). Unveiling the Enigmatic Dwarf Horseface Loach *Acanthopsoides molobrion*: A Groundbreaking Discovery in Indonesia. Biosaintifika: Journal of Biology & Biology Education, 16(2), 265-272.

**Valen, F.S.; Anugerah, P.; Maharani, M.D.K.; Pamungkas, A.; Anwar, S.; Nomleni, A.; Jatayu, D.; Insani, L. and Swarlanda.** (2023b). First record of Siamese

fighting fish, *Betta splendens* (Regan, 1910) (Anabantiformes: Osphronemidae), in Bangka Island, Indonesia. AACL Bioflux, 16 (5), pp. 2671 – 2677.

**Valen, F.S.; Hasan, V.; Ottoni, F.P.; Nafisyah, A.L.; Erwinda, M.; Annisa, A.N. and Adis, M.A.** (2022a). First country record of the bearded gudgeon *Pogoneleotris heterolepis* (Günther, 1869) (Teleostei: Eleotridae) from Indonesia. IOP Conference Series: Earth and Environmental Science, 1036(1): 012074.

**Valen, F.S.; Mamat, N.B.; South, J.; Ottoni, F.P.; Vieira, L.O.; Kamarudin, A.S.; Afandi, A.Y. and Hasan, V.** (2024a). Unveiling the occurrence of vulnerable Sisorid catfish (Teleostei: Sisoridae) in Bangka based on morphological and molecular evidence. Biodiversitas, 25(11): 4543-4550.

**Valen, F.S.; Notonegoro, H.; Pamungkas, A.; Swarlanda. And Hasan, V.** (2023a). Revolutionary Breakthrough: Unveiling the first DNA Barcoding of the Endemic wild *Betta burdigala* (Kottelat and Ng 1994) (Anabantiformes: Osphronemidae): A Critically Endangered Wild Betta from Bangka Island, Indonesia. International Journal of Agriculture and Biology, 30(4): 269-275.

**Valen, F.S.; Widodo, M.S.; Islamy, R.A.; Wicaksono, K.P.; Soemarno.; Insani, L. and Hasan, V.** (2022b). Molecular phylogenetic of silver barb *Barbonymus gonionotus* (bleeker, 1849) (cypriniformes: Cyprinidae) in Java, Indonesia. IOP Conference Series: Earth and Environmental Science, 1036(1): 012011