On the Presence of

08-2023, PreQC No: jfp-23-122006 (PQ), 18-Dec-2023, QC No: 3-122006, 25-Dec-2023, Manuscript No: jfp-23-122006 (R), 30-Dec-2023, DOI: 10.4172/2332-2608.1000481

Badreddine A, Khatib L, Lakkis S, Aguilar R (2023) On the Presence of on-Indigenous Three Soft Coral Dendronephthya sp. in the Lebanese Waters. rn Mediterranean Sea. J Fisheries Livest Prod 11: 481.

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Short Communication

Dendronephthya is a genus of so corals found in the tropical waters of the Indo-Pacific Ocean. It is also reported in the northern Red Sea [1,2].

In the Mediterranean Sea, *Dendronephthya* sp. was reported from its southern Levantine Sea for the rst time in May 2023 [3]. In this context, this note will discuss the rst presence of the new Non-Indigenous Species (NIS) so coral of the genus Dendronephthya in the Lebanese waters, Eastern Mediterranean Sea.

On 02nd March 2023, rst specimens of the new so coral species were observed and photographed by Lebanese professional divers (LK, and SL) during a marine biodiversity survey at a depth ranging between 34 and 40 m o a rocky bottom at 2.5 km o shore Byblos coast, north Lebanon (Figure 1). A er the divers shared the photos and videos with the authors (AB and RA), it became clear that it is the new NIS three so coral of the genus *Dendronephthya* (Figure 2A). Accordingly, the diving team monitored the species at the same spot, and some samples were collected and preserved in the Institute of the Marine Protected Area of Tyre Coast Nature Reserve (TCNR), with code LEBSPI19.

Based on the monitoring, the species fast propagation was signi cant: on 16th April 2023, a colony of the so coral started to be observed at a depth of 42 m of Byblos rocky bottom (Figure 2B), and on 16th May 2023 dense colonies of Dendronephthya sp. (Figure 2C) were observed and photographed. It is well noted that the species' colonies can still be observed at the exact location. From a morphological point of view, Dendronephthya sp. photographed and collected from the Lebanese waters is similar to those described from other Levantine Sea countries [3]. It is characterized by its diverse polyp colors and intricate branching structure with polyps that extend from the branches [3].

Based on [3], the species of Dendronephthya newly introduced in the Mediterranean Sea could be non-Indigenous. However, more investigation and genetic analysis of specimens are still needed to con rm if the introduction of Dendronephthya sp. in the Mediterranean Sea still needs to be clari ed. However, whatever the introduction vector (e.g., aquarium release or Suez Canal), Dendronephthya sp. should be followed up, knowing its rapid expansion (Nativ et al., 2023, and proved in this current note), and its fast propagation mode by asexual

propagation [4]. is note provides the rst documented evidence of Dendronephthya sp. in the Lebanese waters, expanding this genus's known distribution in the southern Levantine sea of the eastern Mediterranean Sea. e ecological role of so corals in this region remains to be elucidated. However, it is worth noting that so corals are vulnerable to environmental stressors, including climate change and pollution [1]. In this context, further research and investigations into the taxonomy, ecology of Dendronephthya sp. are warranted for e ective monitoring, allowing the assessment of their distribution status and anticipating the potential impacts on the local marine habitats.

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