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SUYUKI
YASAM



MAR
IAS

Denizel İstilacı Yabancı Türler Projesi

Marine Invasive Alien Species and MarIAS Project

Mehmet GÖLGE

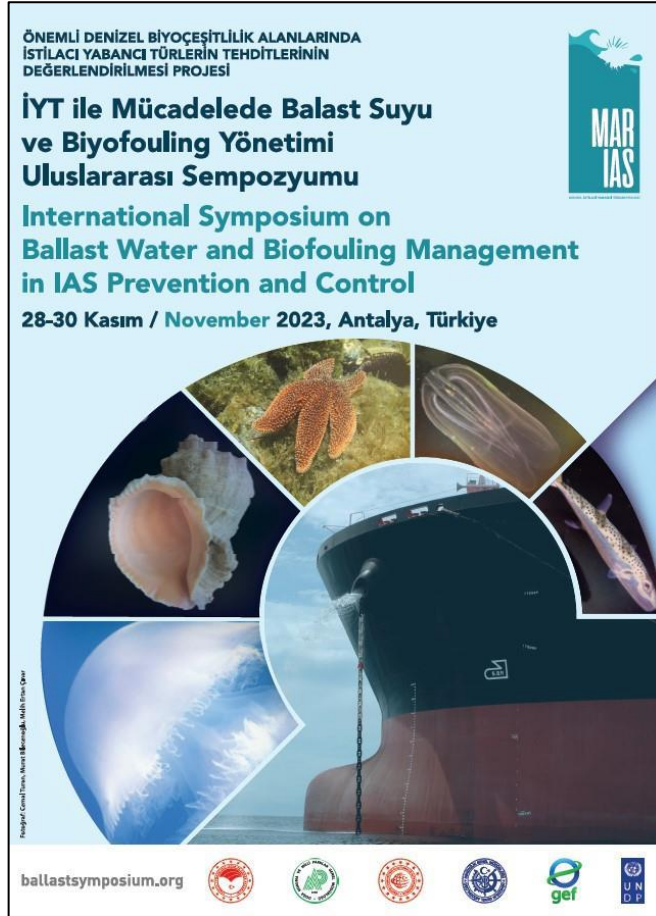
Project Manager

(UNDP Türkiye Country Office)

International Symposium on Ballast Water and Biofouling Management in IAS Prevention and Control
28-30 November 2023 / Antalya-Türkiye



Content



- Invasive Alien Species in Turkish Seas
- MarIAS Project

Marine Invasive Alien Species

PLOS ONE

RESEARCH ARTICLE

Current status (as of end of 2020) of marine alien species in Turkey

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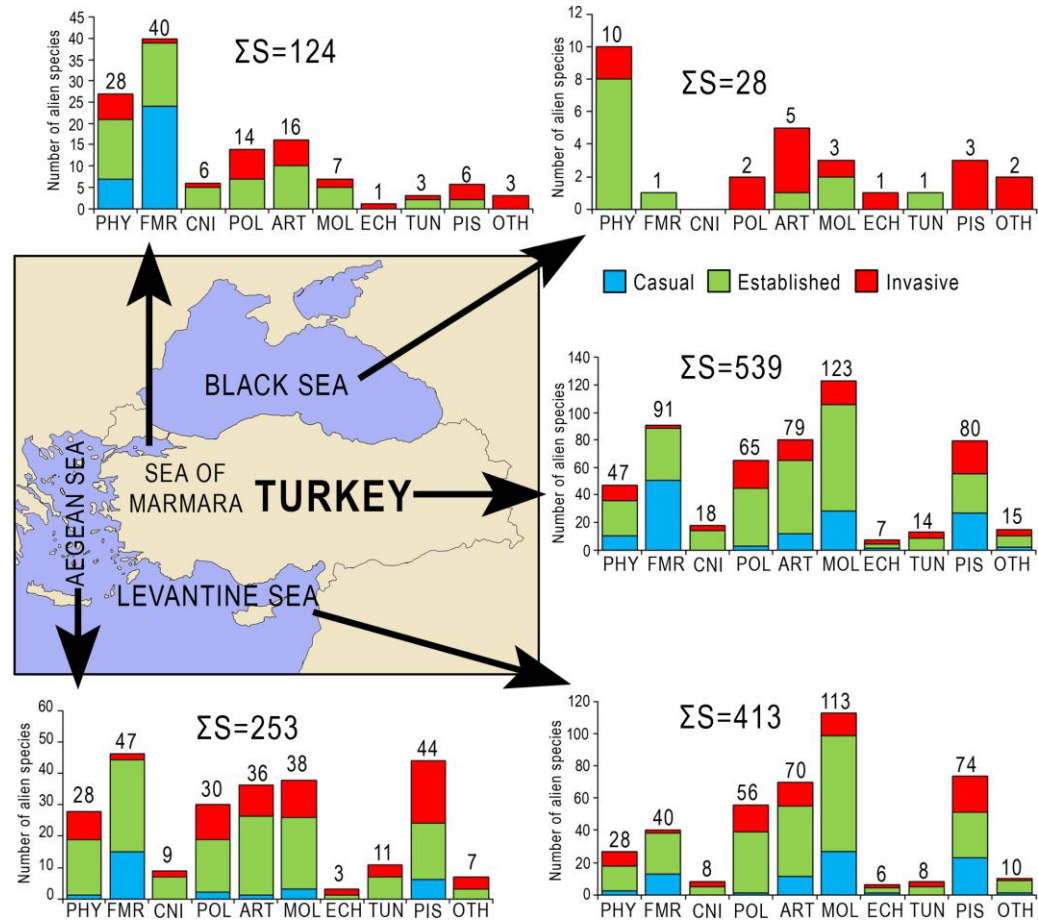
Check for updates

Abstract

- The update of marine alien species list of Türkiye: 2011→2020
 - **539 alien species**
 - 18 taxonomic groups
 - 404 established
 - 135 casual
 - +185 new alien species since 2011
 - **105 invasive (19%)**

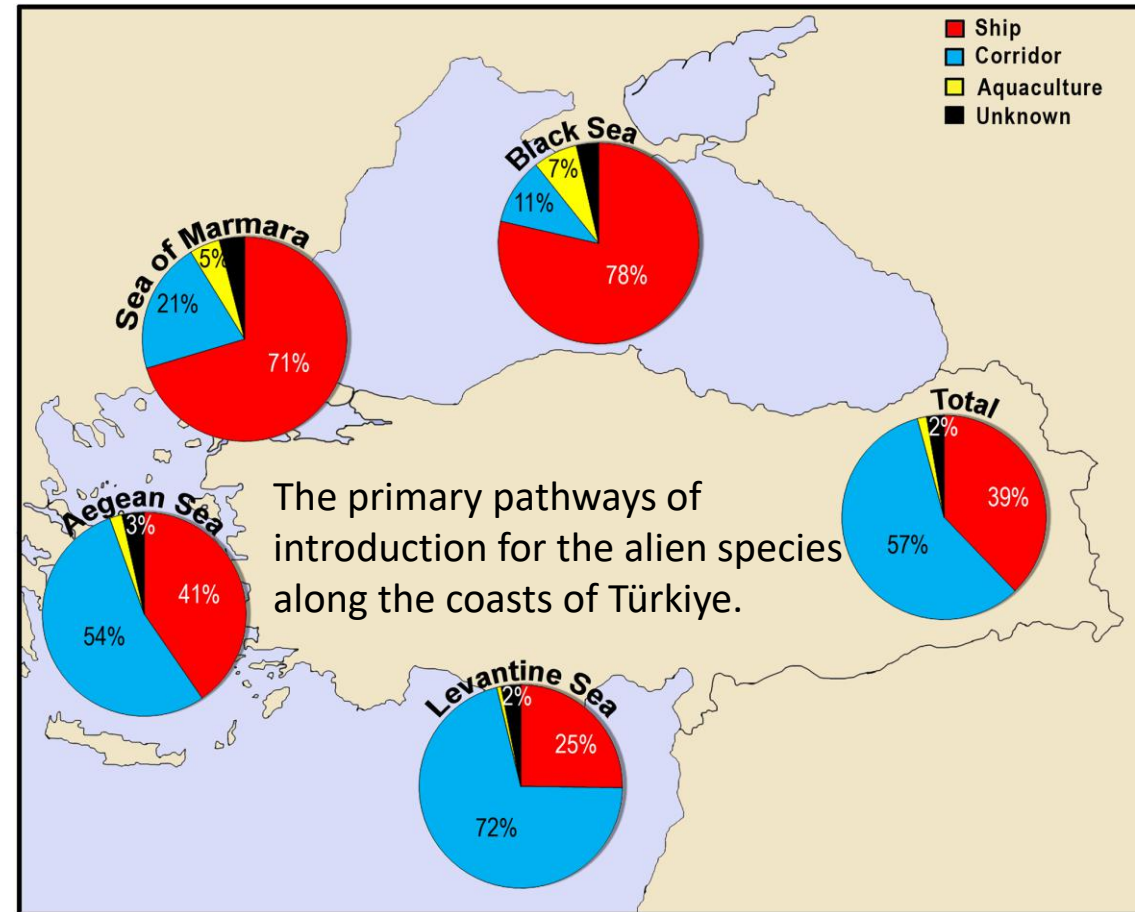
<https://doi.org/10.1371/journal.pone.0251086>

Marine Invasive Alien Species - cont'd

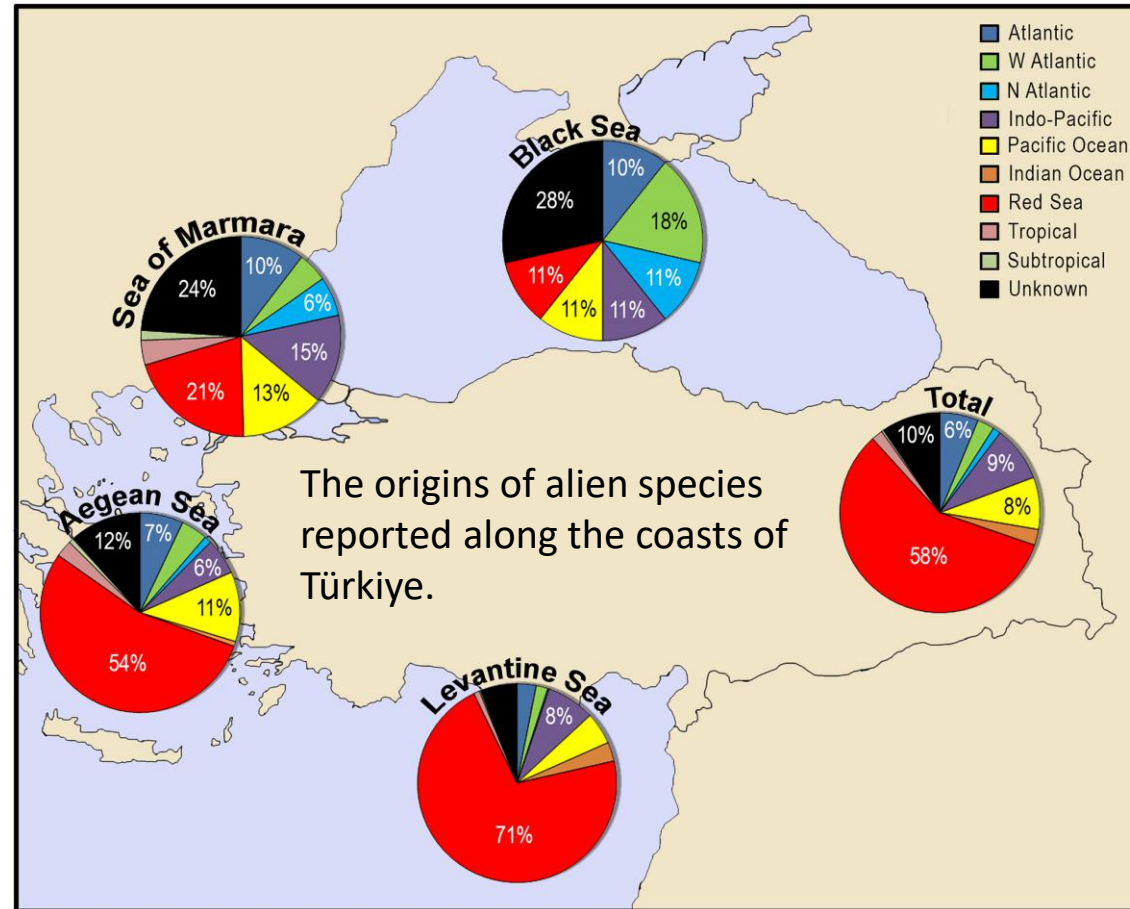


Number of alien species in four seas surrounding Türkiye, and their distributions to major groups and their establishment success in each sea.

Marine Invasive Alien Species - cont'd



Marine Invasive Alien Species - cont'd



MarIAS



Addressing Invasive Alien Species Threats at Key Marine Biodiversity Areas



MarIAS / The Project Identity

- **Duration:** 60 + 18 months (2018 – 20235)
- **Implementing Partner:** Turkish Ministry of Agriculture and Forestry – General Directorate of Nature Conservation and National Parks
- **Implementing Agency:** UNDP Türkiye CO
- **Target:** To ensure resilience of marine and coastal ecosystems through strengthened capacities and investment in prevention, detection, control and management of invasive alien species

MarIAS / The Project Goal and Objective



14 LIFE
BELOW WATER



The long-term project goal:

- To minimize negative impacts of IAS in order to support the conservation of the globally significant native biodiversity of Türkiye's coastal and marine ecosystems.

The project objective:

- To ensure resilience of marine and coastal ecosystems through strengthened capacities and investment in prevention, detection, control and management of invasive alien species.

The project also seeks:

- To promote gender equality and women's empowerment, to the extent relevant and feasible within the scope of the project.

MarIAS / Components



Effective national policy framework on marine invasive alien species (IAS)



Capacity building, knowledge and information sharing systems to address the IAS threats



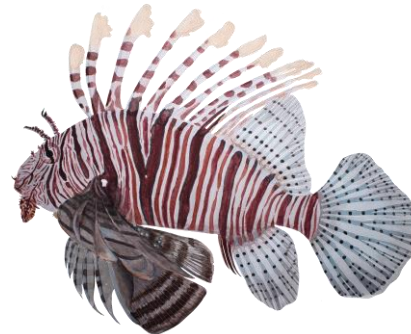
Investment in sustainable management, prevention, eradication, and control of IAS and restoration of IAS- degraded habitat at key marine and coastal areas.

MarIAS / Pilot Sites



MarIAS / Target Species

- Lionfish (*Pterois miles*)
- Pufferfish (*Lagocephalus sceleratus* / *Tetraodontidae*)
- Sea snail (*Rapana venosa*)
- Water hyacinth (*Eichhornia crassipes*)
- Common starfish (*Asterias rubens*)
- ...



MarIAS / BW Related Activities



- **Output 1.5:** Regulations and standards on control, minimization and removal of IAS from ballast water developed jointly with MoTI and put for enforcement
 - 1. Establish National Technical Working Group on implementation of the Ballast Water Convention
 - 2. Revision and updating of the National Ballast Water Strategy, in line with international best practices and Turkey's obligations and commitments under the Ballast Water Convention
 - 3. National legislation for compliance and implementation of Ballast Water Convention prepared and adopted
 - 4. National regulations and by-laws on implementation of National Ballast Water Strategy and Ballast Water Convention developed and adopted

MarIAS / BW Related Activities – cont'd



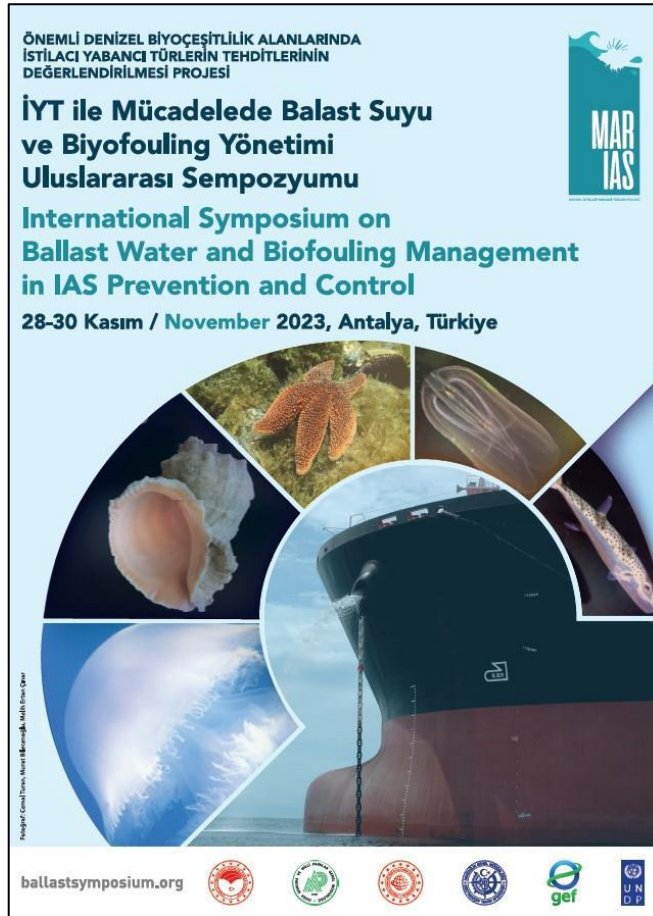
- **Output 1.5:** Regulations and standards on control, minimization and removal of IAS from ballast water developed jointly with MoTI and put for enforcement
 - 5. Establishment of compliance and enforcement mechanism for implementation of Ballast Water Convention
 - 6. System for monitoring compliance and implementation of the Ballast Water Convention
 - 7. Practical workshops on capacity building of MTMAC personnel working in sampling and analysis of ballast water and sediment, to support implementation of National Ballast Water Strategy and Ballast Water Convention, including application of eDNA sampling and analysis to demonstrate ballast water contamination

MarIAS / BW Related Activities – cont'd



- **Output 1.3:** Protocols and quarantine mechanisms consistent with bio-security requirements and international standards for IAS in marine and coastal wetland ecosystems in place

MarIAS / BW Related Activities



- **Output 2.3:** Engagement with shipping industry, and transport and customs sectors, on implementation of regulations and standards on control, minimization and removal of IAS from ballast water; and on procedures for regulating the entry of species for ornamental and aquaculture purposes to mitigate the introduction of marine and freshwater IAS.
 - 1. International symposium on ballast water management
 - 2. Sectoral capacity building for implementation of regulations and standards on the control, minimization and removal of IAS
 - 3. Capacity building for customs and transport authorities on control of marine IAS in non-shipping sector

Challenges

- Marine areas have no borders/barriers
- Some IAS are uncontrollably reproducing and spreading at geometric rate
- Suez Canal is a constant source, cannot be closed
- So many different stakeholders, sometimes difficult to coordinate
- Lack of enough scientific studies and researches
- Requires huge financial source and workforce
- Some of them have economic value, conflicts occur

Results

- Some steps have been taken. Some are ahead.
- Institutional capacity increased.
- Raised awareness in stakeholders.
- In need of more financial support and public opinion.
- Full eradication and/or control is not possible.
- Prevention is the most cost-effective way.
- Early detection is crucial.

**Thank you for
your attention**

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