

BLACK LIST AND ALERT LIST OF THE AQUATIC INVASIVE ALIEN SPECIES IN THE IBERIAN PENINSULA: AN ACTION OF THE LIFE INVASAQUA

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One of the objectives of LIFE INVASAQUA project is to develop tools that will be more efficient the Early Warning and Rapid Response (EWRR) framework for Invasive Alien Species in the Iberian Peninsula. Horizon scanning for high-risk IAS is basic in implementing measures to reduce new invasions, developing Alert lists, and to focus effort in the species already established, for instance making a Black list.

We developed a trans-national horizon scanning exercise focused on inland waters of Spain and Portugal in order to provide a prioritized lists (Black list and Alert list) of aquatic IAS that may pose a threat to aquatic ecosystems and socio-economic sectors in the future.

We followed a step approach of existing information about IAS (Plants, Freshwater Invertebrates, Estuarine Invertebrates and Vertebrates; 127 established taxa in Black list; 90 non-established taxa in Alert list) combining with an expert scoring of prioritized taxa.

IAS established in the Iberian aquatic system consistently highlighted as the worst included vertebrates (e.g. *Cyprinus carpio*, *Gambusia holbrooki*, *Silurus glanis*), freshwater and estuarine invertebrates (e.g. *Procambarus clarkii*, *Dreissena polymorpha*, *Pacifastacus leniusculus*, *Ficopomatus enigmaticus*, *Callinectes sapidus*, *Corbicula fluminea*) and plants (e.g. *Eichhornia crassipes*, *Azolla filiculoides*, *Ludwigia grandiflora*).

Amongst taxa not yet established (Alert list), expert pointed to *Perna viridis*, *Hydroides dirampha*, *Dreissena bugensis*, *Procambarus fallax f. virginallis*, *Percottus glenii* with higher risk of invasion, ecological and socioeconomic impacts. Over 20.6% of the taxa in the preliminary black list received no votes (no prioritization) by experts, 17.8% in the initial alert list.

Our horizon scanning approach is inclusive of all-taxa, prioritizes both established and emerging biological threats across trans-national scales, and considers not only the ecological impact, but also potential direct economic consequences as well as the manageability of invasive species. This work received funds from the LIFE Programme (LIFE17 GIE/ES/000515).



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