

What are alien invasive species?

Alien invasive species are those species that reach nature to settle and then uncontrollably reproduce, causing serious economic losses and agricultural, environmental and health damages.

How do they affect agriculture?

1. They cause losses in agricultural production.
2. They cause serious damages to irrigation infrastructures (pipes, filters, irrigation systems, etc)
3. They increase production costs due to the need for control and removal works.
4. They reduce the amount of water, as an agricultural resource, due to evapotranspiration.
5. They accumulate heavy metals that could affect agricultural soil.

Other invasive species that impact irrigation



Asian clam



Zebra mussel



Apple snail



Bryozoans

Fertilisers and the water hyacinth

In Extremadura, **agriculture and livestock are directly linked to invasive species**, regarding both growth and expansion as well as damages caused.

The excess of fertilisers for growing crops favours both the growth and multiplication of invasive plants such as the WATER HYACINTH (*Eichhornia crassipes*).

The presence of the water hyacinth in the Guadiana river does not only depend on uncontrollable factors (such as temperature) but also **requires water with high levels of nutrient content** (nitrates and phosphates), largely coming from the use of agrochemicals in the irrigation areas of the Guadiana river basin.

For that reason, IT IS NECESSARY to reduce the nitrogen content in the Guadiana river, which will surely help fight this invasive species and others.



The water hyacinth removal works have stopped this invasive plant from invading irrigation networks, which otherwise would have caused serious damage to infrastructures and severe economic losses for farmers.

You can prevent it!

