



LIFE 08 NAT/E/000072

RECOVERY OF THE RIPARIAN HABITATS ON THE TER
RIVER

ACTION PLAN

Chemical control of resprouting species

Acer negundo

Gleditsia triacanthos

Ligustrum japonicum

Platanus hispanica



BACKGROUND

In order to find a method of controlling species like *Acer negundo*, *Gleditsia triacanthos*, *Ligustrum japonicum* and *Platanus hispanica*, various actions have been carried out in the Girona region between 2006 and 2012 to assess the chemical control of these species. The tests carried out have led to the development of a plan for controlling these trees.

These actions have been led by Galanthus (Centre for environment studies and dissemination) within the framework of various projects funded by the public authorities in different natural spaces throughout the province. The most recent of these, which is directly linked to riparian environments, was carried out during 2012 within the framework of the LIFE RIPARIA-TER project, with conservation activities focusing on eradicating these two species.

METHOD OF CHEMICAL CONTROL

With easy access to the trees that are going to be treated, which often involves clearing the vegetation beforehand, the tree is felled. The treatment is applied by drilling holes and injecting glyphosate into the stump. This results in translocation of the herbicides, which kills the entire tree, thus preventing resprouting. Trees are preferably treated during their active period, and the treatment consists of several different steps:

DRILLING

Holes are drilled in the stump of the tree using a no. 8 -10 drill bit, making a 2-cm vertical hole in the periphery of the crown. The number of holes will be directly proportional to the circumference, making a hole every 4 cm. For stems with a diameter of less than 2 cm, a single hole may be made in the base.



APPLICATION

The active ingredient GLYPHOSATE (ISOPROPYLAMINE SALT) [SL] W/V is diluted in water to a concentration of 12%.

They are injected using an automatic syringe (used by vets to administer medication to livestock) to achieve a clean, precise application.

First, 1 ml of a 12% Glyphosate solution (in water) is injected into each hole.

MAINTENANCE

Maintenance is carried out after six months to eliminate any resprouting, which is expected to be low density. Tests have been carried out, with good results, applying 3% Glyphosate by foliar spraying using a low pressure backpack sprayer. Seedlings of these species are uprooted.

FACTORS TO CONSIDER



The products must be applied taking into consideration all the necessary safety measures and following the pertinent regulations.



During the work required to enable access for application of the products, it is important not to clear plants with a smaller diameter.



It is recommendable to treat the trees during their vegetative period, although some tasks have been carried out on dormant trees with good results.



It is important to make sure that the herbicides are applied as soon as possible after drilling the holes to ensure the maximum response.



If trunks are removed, it is important to ensure that the terrain is disturbed as little as possible to prevent the activation and germination of seeds. It is preferable to cut them up and leave them where they are, provided that there is no risk of the trunks being carried away by water, as this could disperse seeds and disturb the ground.



It is essential to carry out checks and maintenance throughout the first year to ensure the complete eradication of these trees.




Extra precautions must be taken when there is surface water near the trees that are going to be treated. Care should be taken to avoid accidental spillage of the product.





Livestock must be prevented from entering the treated area for the length of time recommended on the safety label of the phytosanitary products.


CONCLUSIONS


 Box elder, Japanese privet, honey locust and plane trees can be managed by chemical control.


 The treatment is estimated to cost about €0.50 / m².

 Despite the possibility of controlling them, the economic cost needs to be considered, as do the environmental risks that come with the use of herbicides.

 The desired results can be achieved during much of the year, so this does not pose any limitation.

 The maintenance treatments are not expensive, but they are crucial for the complete eradication of these trees.

 It takes a minimum of one year to eradicate a stand of trees, including the initial treatment and two maintenance treatments, one in autumn and another in spring.

 It is vital to train and involve the personnel who perform these treatments in order to ensure that they are carried out carefully and thoroughly.