

Broad-leaved pepper tree and hygrophila

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Broad-leaved pepper tree, *Schinus terebinthifolius*, Family Anacardiaceae.

In Queensland and New South Wales this tree is in the early stages of spread; eventually many of the districts now troubled by groundsel bush will be infested. Coastal swamp oak areas, riparian zones, mangrove and wetlands are particularly vulnerable to broadleaved pepper tree. Nature conservation reserves are threatened by this highly invasive Brazilian weed. In a grazing situation dense jungles develop which replace pasture, interfere with stock movement and the tree is toxic to grazing animals.

In NSW the plant is a W2 noxious weed, in the Far North Coast County Council area. In Queensland it is a Class 3 pest plant under the Land Protection Act.

Chemical control is the only practical option available to landholders at present.

To be effective a control method must deliver above 90% mortality from a single application. Fluroxypyr (Starane™) diluted at 1:300 with water applied as a high volume overall spray produced the best results. After 12 months trees sprayed in winter demonstrated 97% mortality, whereas plants treated during summer resulted in 70% kill. Chain sawing the trees down to ground level, then spraying the stumps with glyphosate diluted at 1:1 water produced 100% mortality after 26 months. Not more than one minute must elapse between cutting and spraying, or the results will be poor.

Reinvasion of the trial areas has been slow. Broadleaved pepper tree makes an excellent target for weed control, as it is easily sprayed with conventional ground equipment, can be identified by the layperson and at present infestations are at a manageable size.

Hygrophila, *Hygrophila costata*, Family Acanthaceae

The hygrophila genus is widely used in aquariums for it has attractive under water foliage. Any water plant catalogue will have at least 6 species of hygrophila list for sale. Most of the current infestations can be traced back to a bridge crossing where a water plant grower has deliberately planted this species.

The plant is of American origin and a familiar weedy cousin would be the vine thunbergia. Hygrophila is an emergent water plant growing in moist soil or in water up to 1m deep. It occurs in all fresh waterways,

creeks, dams, rivers, wetlands either slow or fast moving water. Brackish water is toxic to the plant.

In Queensland hygrophila is a class 1 pest plant. It must be eradicated.

Good control has been achieved by using 'water registered' glyphosate products such as Weedmaster Duo. The only problem seems to be that glyphosate does not translocate below water level. Any regrowth invariably stems from under water sections of the plant.

Hygrophila is in the early stages of spread in both Qld and NSW. It is advisable to survey water ways and treat any infestations found.