

LORD OF THE WEEDS COMPETITION

Small leaf privet



BY SAMANTHA ROSE ZAPIRAIN

Lord of the Weeds!!!

Privet "*Ligustrum sinense*"

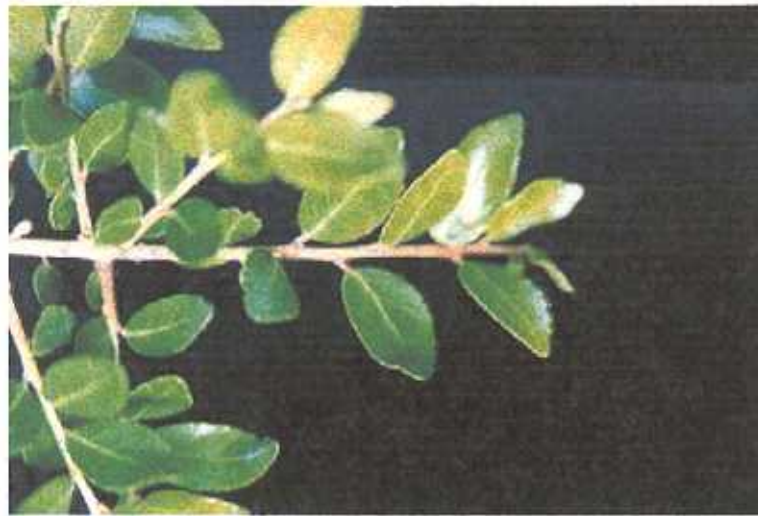


The area that has been studied that is infected by the noxious weed Privet (*Ligustrum sinense*) is the Dorrigo High School, located in Dorrigo, inland from the coast, in the state of New South Wales. The Dorrigo Area has a very cool climate all year round and experiences frosts in winter. The topography of the Dorrigo Plateau is a very undulating landscape.

This area in the Dorrigo High School is quite important to the community and the school students. The area that is infested is located at the back of the sporting field along the outside of the fence that joins onto the back area off the Ag farm where trees are being grown. The growth of this weed is minimizing the amount of other crops that could be grown under the trees that could help create a more sustainable farm. If the Privet were removed and controlled the area then could be utilized towards the growth of pastures under the trees and native shrubs that would bring more native birds to the area. The weed has become a major problem in this area as there are many locations throughout the Dorrigo Plateau where this noxious weed has infested and is quickly becoming a dominating factor that if not controlled and removed shortly will eventually take over. This area is unique as it is a place of learning and education for the students of Dorrigo.

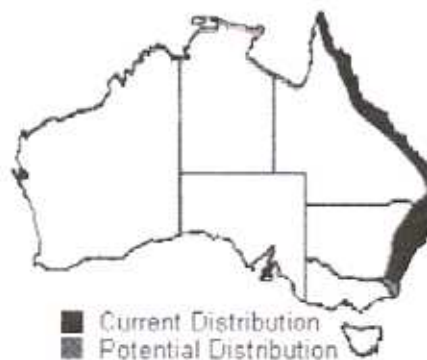
The Privet that is infesting the School in Dorrigo is the small leaf type of Privet. It has been given the name of a weed as a weed is any plant growing out of place or where it is not wanted.

Privet - Small-leaf



NOXIOUS WEED: [W4b](#)

Ligustrum sinense



family: **OLEACEAE**

Also known as **Chinese Privet** and **Hedge Privet**: a much-branched, hardy, evergreen, fast-growing shrub to 4m from Asia, formerly used extensively for hedging. Evergreen to semi-deciduous (in cooler areas) small tree to 5 m high. Leaves elliptic to ovate, margins entire, similar colour on both surfaces. Mature leaves 2–6 cm long, 1.5–2.5 cm wide, on stalk 0.3–0.7 cm long. Berry 4–7 mm long, black and succulent when ripe; seeds 3–4 mm long.

Distinguishing features: Distinguished by small leaves; white fragrant flowers with pink to purple pollen bearing parts of the flower (anthers); at least mid vein of lower leaf surface with short, weak, soft hairs; small branches with whitish corky areas through which gaseous exchange takes place (lenticels). Leaf edges on seedlings often wavy (see photo).

Dispersal: Seed spread by water and birds.

Leaves are oval with a pointed tip, to 6cm long, and often have a wavy margin. Masses of heavily-scented tiny white tubular flowers occur in drooping sprays in spring; they are highly allergenic.

Sprays of small round blue-black berries persist into winter.

This Noxious weed privet is dispersed all over Australia. An has a detrimental impact on the bushland. As the weed Privet seeks out the more fertile soils of gullies, creeklines and rainforest edges, and watercourses affected by urban runoff; shades out native plants, transforms habitat

Privet is classified under the noxious weed act as a **Noxious Weed - category W4b**

The weed must not be sold, propagated or knowingly distributed and any existing weed must be prevented from flowering and fruiting.

Problems and significance of the weeds identified.

The weed Privet is identified as a noxious weed under the category W4b. Category W4b in the noxious weed act means that the action specified in the declaration must be taken in respect of the weed. The weed must not be sold, propagated or knowingly distributed and any part of the weed must be prevented from growing within 3 meters of the boundary of a property. The term noxious according to the Macquarie dictionary (1991), is;

Harmful or injurious to health or physical well being.

(Of an animal, insect, plant, etc.) Declared harmful by statute law for compulsory eradication.

The management strategies to control the identified weed

There are many strategies that can be adopted to use in weed management, however not all of the strategies may be suitable in controlling this particular weed. The suppression of privet can be achieved through the competition by beneficial plant growth, using herbicides, mechanical or physical activities, and using biological agents.

Technique:

Hand Pull /

Dig

Consideration

The plant should be small enough to ensure the entire root will be removed, or

The plant should not be able to resprout from any remaining root system

Tools and Equipment

Gloves, knife, hand trowel or similar

Procedure

The plant has a root system of underground rhizomes, tubers or similar organs from which new plants can reproduce.

Tools and Equipment

Gloves, hand trowel, knife or similar

Procedure

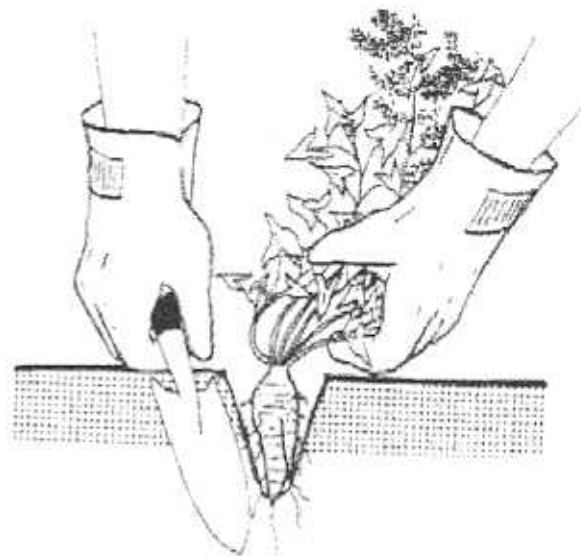
Rake back ground mulch

Grasp the plant at ground level gathering the stems or leaves together at ground level and using the appropriate tool, clear the soil from around the immediate root zone of the first rhizome or tuber

Trace the underground lateral stems / roots and remove any secondary rhizomes or tubers.

Remove the roots, rhizomes, tubers and any attached soil

Replace the disturbed soil and ground mulch



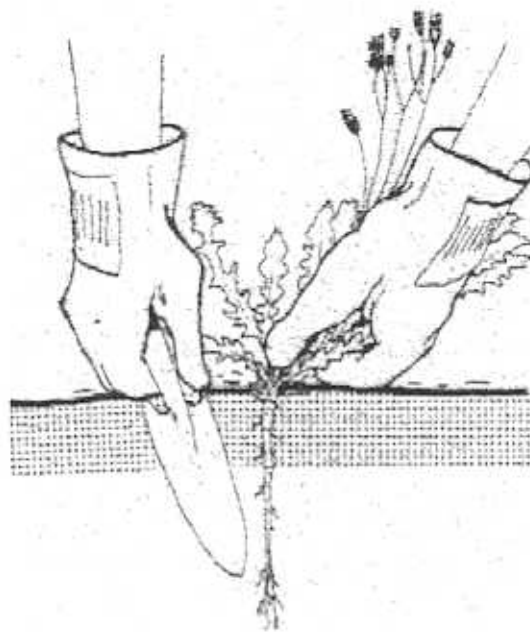
When using herbicides, handling and cleaning procedures should be undertaken in accordance with the label and the herbicide's Material Safety Data Sheet. Material Safety Data Sheets are made available by the manufacturer.

- ◆ **Read the label before opening the container and follow the instructions exactly.**
- ◆ **Herbicides are poisons, and should be handled with the greatest respect. They can be absorbed very easily through the skin, by breathing the vapours, and by ingestion.**
- ◆ **Wear protective clothing: long sleeves, long pants, sturdy shoes, gloves, eye protection. Always wear waterproof gloves. A respirator is advised when mixing or pouring the liquid**
- ◆ **Wash skin and equipment afterwards. Wash contaminated clothing separately.**
- ◆ **Clean up any spills, including on your skin, with large amounts of water, or by shoveling up contaminated soil and disposing of it at the tip**
- ◆ **All herbicide application mentioned in these methods refer to the use of glyphosate360-based products only, unless otherwise stated**

Technique: Stem Scrape

Consideration

The stem is too small to be drilled with a chisel, yet large enough to be scraped without



Rake back ground mulch

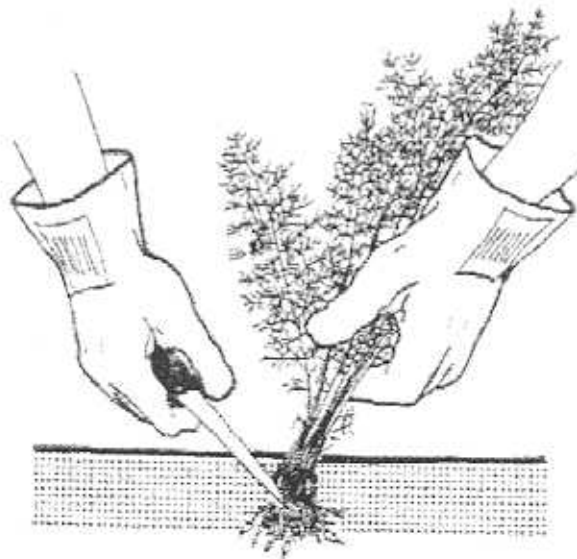
Insert knife or similar tool and loosen the soil around the plant roots. Keep soil disturbance to a minimum

Grasp the stems or leaves of the plant at ground level and pull while freeing the roots with the knife

Remove the plant and shake off excess soil

Replace disturbed soil and any ground mulch

Technique: Crown Cut



Consideration

The underground meristematic (growing heart) part of the plant only needs to be removed, or above ground in the case of palm species.

The plant should not be able to resprout from the remaining root system

Tools and Equipment

Gloves, knife

Procedure

Rake back ground mulch

Grasp the plant at ground level gathering the stems or leaves together.

Insert a knife so as to cut the root system below the crown or underground stems

Remove the plant whilst cutting the lateral roots

Ensure the knife is used for cutting rather than levering

Replace the disturbed soil and ground mulch

Technique: Rhizome / Tuber Trace

Consideration



cutting right through

The plant has aerial tubers which will drop and germinate if the plant is physically removed or the stem is cut through, and

The herbicide is mixed to the recommended ratio

Tools and Equipment

Knife, herbicide and herbicide applicator, appropriate clothing and safety wear

Procedure

Scrape along the stem of the plant for approximately 150mm to expose the vascular tissue

Apply herbicide to the exposed vascular tissue within 30 seconds after beginning the cut

Do not take any further action or disturb the plant until it is completely dead

Any dead material which may be a fire hazard (e.g. vines) should be removed for a distance of at least 5 - 10m from a property boundary

Technique: Cut and Paint

Consideration

The plant should not have aerial tubers

The weed debris will not substantially increase the local fire hazard, and

The herbicide is mixed to the recommended ratio

Tools and Equipment

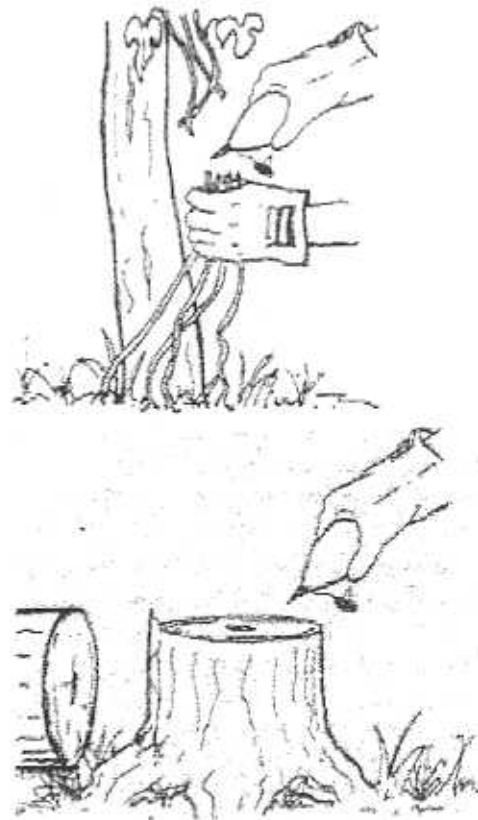
Appropriate tools to cut stem (knife, secateurs, loppers, bush-saw or folding saw), herbicide and herbicide applicator, appropriate clothing and safety wear

Procedure

With a flat cut, cut the stem / trunk as close to the ground as practicable, below any branching stems or side shoots

Apply herbicide to the exposed vascular tissue within 30 seconds after beginning the cut.

Do not take any further action or disturb the plant until it is completely dead



Many of these techniques can be quite effective to the management of privet however some with some techniques you will still be getting re growth occurring. That's why it

is much more effective to use an IWM, an integrated weed management strategies. This strategy is where a number of management practices are combined at the same time to control a weed problem. IWM is often very effective and essential to be used on a noxious weed such as Privet as it is usually longer lasting, there is also a lesser chance of herbicide build up, and it is usually much more cost efficient and longer lasting which is the effect that in a good management plan is essential.

Some IWM management strategies that can be used in the control of privet are the combination of physical and chemical control in the form of herbicides. An example of the combination of these two controls include the physical removal of cutting the privet off at the and leaving a stump, then painting the stumps with an herbicide preferable Round up because it works more effectively then most other herbicides in the control of privet.

I have put together a strategy that can be utilized in the control and management of the infestation of Privet at my High School in Dorrigo. It involves the use of IWM (integrated weed management) and a lot of dedication. Through a lot of research and interviewing farmers in the area who through many years of farming have formulated their own ways of controlling and managing this noxious weed of privet I have formulated this strategy. As the infestation of privet At Dorrigo is largely spread and is not all that developed yet the stumps are not all the big yet which is good. A mulcher, which is like a combined harvester, can be taken through the grounds to take out the stumps of privet, it can take out the stumps of privet up to 16cm in diameter. The mulched up privet is then left as a blanket on the ground to help smother the other weeds. Once the area infested with privet has been mulched, someone can come through and spray the whole area with Brush off or round up. However, if the area that is being sprayed is close to the water spray disks must be put up near the water. And if any drift from the spray is observed on this paper spraying should be stopped immediately. Through the use of this strategy the combination of two controls are being used which is the use of IWM and it is essential for a longer lasting, and more cost efficient in the long run.

The Merits of the designed weed management strategy

The strategies to get rid of and control this weed infestation of privet will improve the studied area of the Dorrigo high school greatly. Once this weed infestation has been removed and controlled, Dorrigo High school plans to re vegetate the area with native trees, which will increase habitat diversity by planting native species of trees. This practice in itself by revegetating the area after the Privet infestation has been removed will prevent and erosion factors that could happen if the area was left with out management.

The revegetating of this area after the privet has been removed can have a very positive impact on the school and community. By underplanting trees in thee forest where the privet is at the present time, the planting of the trees can set the school up for revenue down the track and also economical gain down the track. Also the removal of this noxious weed is taking a step forward to controlling the weed in the country and making sure that the weed does not get out of hand and spread.

This strategy of re vegetating the area once the infestation of privet has been removed should not be all that hard to continue the management process once it has been

initiated. Once the infestation has been controlled and removed from the area and the native trees have been planted, any re-growth of privet that may occur if acted upon quickly and appropriately should not pose as a problem and should not inhibit the strategies from becoming long-lasting and efficient and sustainable to the environment.

Predicted problems are that as the area that is infested is under the shelter of a forest and native trees that are chosen would have to be chosen to be suitable to be grown in such conditions and climate that is in Dorriggo. The problems of choosing the wrong native trees to be planted under the shades of the forest are that the native trees may not survive giving any change to the privet of coming back and re-infesting the area again. And even if the native trees are suited to the conditions available and the climate if a re-infestation of privet does occur, the privet then may take over and would win the fight for available light sources and space and eventually kill the native trees if the infestation is not controlled as quickly as possible.

There are many positive sides of the re-vegetating the area with native trees, it is providing an increased habitat diversity, bringing more native birds to the area and providing an education to the Dorriggo High School students on the importance of weed control on how it can be accomplished and managed and also followed up which is shown by the planting of native trees in the place of the infestation. Another very important benefit is that the infestation of the noxious weed privet is being controlled and prevented from spreading its seeds further.

In conclusion the privet infestation at the Dorriggo High School can be managed and controlled through many strategies. However, through the use of IWM (Integrated Weed Management) the results are longer-lasting and more cost-efficient on the long term. And also by the practices that are planned to be done as a result of the removal of the infestation a more sustainable and practical environment will be created.

By Samantha Zapirain

Interview

Name: Tony Zapirain

Age: 43

Where do you live (e.g. City, country)? Country

What is your definition of a weed? Any plant growing where you don't want it

Do you know what a noxious weed is? If yes do you have any in your area?
Noxious weed is under the noxious weed act. Yes, privet, Giant Parramatta grass.

Have you heard of the noxious weed Privet? Yes

If yes, do you know of any methods that are used to control this weed? Slashing smaller growth, Boom spraying with Brush Off, Cut and paint with Brush-Off.

Name: Fred Scott

Age: 52

Where do you live (e.g. City, country)? County

What is your definition of a weed? A plant growing where you don't want it to be growing

Do you know what a noxious weed is? If yes do you have any in your area? Not sure what it is but there could be noxious weeds growing in the area.

Have you heard of the noxious weed Privet? Yes

If yes, do you know of any methods that are used to control this weed?
There is manually removing the whole thing with a Bulldozer, spraying with Brush-off, if the trunks are too big drill into the trunk and using a syringe squirt brush off into the hole.

Name: Tom Murphy

Age: 17

Where do you live (e.g. City, country)? County area

What is your definition of a weed? A plant that is chocking out what you want to grow.

Do you know what a noxious weed is? If yes do you have any in your area?
Spreads and chokes out natural plants. Weeds such as Lantana and Parramatta grass.

Have you heard of the noxious weed Privet? Heard of the name.

If yes, do you know of any methods that are used to control this weed?
Pull then out. Spray with chemicals.

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