

The Pest Control Industries Training Academy has successfully completed a Training Project with Eco Rhythm Management (Pty) Ltd., The Department of Environmental Affairs and AgriSETA



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PCITA, as the designated Training Provider, assisted Eco Rhythm Management with their learnership training on NQF level 4 Further Education & Training Certificate: Pest Control Operations

The weed Control training was done over a period of 8 months in Lephalale and on Bangalong, Kiti, Maeteletja and Melinda environmental sites in Limpopo.

The focus was to provide the students with a basic introduction to weed control, the explanations of general concepts, a broad understanding of the weed control industry and definitions as well as the legislative requirements and the protection of the environment which supports the weed control industry.





The following Topics were discussed and training provided to the students and for them to understand the requirements.

Introduction to weed control Relevant Legislation
The biology of weeds
Herbicides
General weed control information
Control of Woody Plants
Management of aquatic weeds
Weed management in turfgrass
Equipment and Calibration
Safety and Environmental Aspects

Training of the students for the preparation and implementation of weed control Module 10 and bush encroachment activities with the emphasis of the implementation of the knowledge obtained.

The Training programme for participants is composed of three interconnected parts.

The first part

Training activities are implemented through Module 10 of the Weed Control handbook followed by practical application of herbicide in the Bush encroachment environment.

Each of the visits was structured through 2 modules in duration of 3 days so that the trainees could acquire knowledge and skills relating to the control of Bush encroachment in the environment.

The second part

Focussed on introducing the students to implementing of the procedures of removing any invader plants and to control unwanted trees that is growing so vigorously on site.

The third part

On site work with the support of the Team Leaders on a specific problem/project of interest for the benefit of the environment.



Pigweed (Amaranth)

Monitoring on work of the Students and their fellow workers after each of the training sessions (hands-on support) this is aimed at providing support to the students to collect data regarding specific encroachments that tend to be a problem in the area.

LEARNING OBJECTIVES

The training approach is based on principles of learning with a focus on peer review during all the steps of planning, organizing, and conducting training and practical activities.

The course models a variety of effective training methodologies, including demonstration, practice, discussion, brain-storming, case studies, role play, and the presentation.

Taking into account all relevant and available information about the training subject, themes and participants, the Team Leaders decided to use following methodology:

- **Teamwork and group work:** Since the participants of the training were adults, who would sometimes find it difficult to listen to other people, the team and group work chose to guide the participants through the training content and particular themes during the sessions.

The participants provided with the opportunity to discuss their work experience and problems related to the particular domain of work.
- **Interactivity:** This approach might be more suitable for participants familiar with the chosen themes, rather than for real beginners, since fellow workers would not possess adequate knowledge, and as such should be more supported and guided by students. However, regardless of their previous inadequate knowledge, student's fellow workers and Team Leaders must cooperate in order to achieve desirable goals.
- **Practical examples:** considering the fact that the Team Leaders were experienced and acquainted with the training themes, one of the most desirable ways to clear some uncertainties among students was drawing attention to the previous real life situations which the Team Leaders experience in the past.
- **Practical work:** after topic presentation and explanation, the students were provided with an opportunity to do some practice. Practicing in joint solution presenting was assigned to the students in group discussion to develop their working skills.

There are four basic methods of controlling invasive alien plants:

Mechanical control:

The most popular methods of controlling bush encroachment mechanically, are chopping, slashing, ring barking and felling. The stumps are then treated immediately with a chemical weed killer.



Solanum mauritianum (Bugweed)

Herbicides can be used effectively to control a range of problem plants.

Chemical control:

The application of registered herbicides to the invasive plants or to the soil surrounding them, with the aim of killing or suppressing the plants. The choice of herbicides, the correct application method, dosage, time of application and follow-up actions are very important.

Take care when it comes to chemical control, as herbicides can contaminate the environment for many years. Herbicides can kill the wrong plants if not applied carefully.

Biological control:

The biological control of woody plants includes the incorporation of browsers and the spread of biological control agents effective for controlling woody plant species. In savanna rangelands, the use of mega-herbivores as biological control agents has been reported to produce effective and desired results. However, the use of browsers together with controlled fire regimes have a significant and considerable impact on the control of bush densities. Biological methods, such as, the use of veld-fires and Boer goats or game may be used as a follow-up treatment in areas where bush densities have been reduced, rather than as an initial method of control.

Indirect control:

Remove invasive alien plants. e.g. ploughing, the use of fire, or the over-sowing of an area with beneficial indigenous plant species.

At the end of the day it is very important to have a Weed Management Program drawn up where all invasive weeds are identified and the control measures are specified

We thank Eco Rhythm Management (Pty) Ltd., The Department of Environmental Affairs and AgriSETA for the opportunity to be involved in this important project to protect our environment

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