

PESTICIDE USE IN TIMBER PLANTATIONS

A **PESTICIDE** is any substance used to protect the trees from pests, including insecticides, fungicides, herbicides, and rodenticides. **Pre-1990s** pesticide use was primarily determined by cost. Since **1990s** this has changed. Now non-target effects and the potential for developing pesticide resistance have a major role in deciding what and when to spray.

NON-TARGET IMPLICATIONS

Non-target organisms (**NTOS**) are those affected by the pesticide but are not the intended target.

Species with similar lifestyles, behaviours and physiology as the pest.



Pesticide applicator.



Other forest users.

Food chain effects.

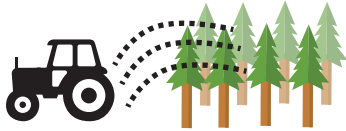


PESTICIDE RESISTANCE

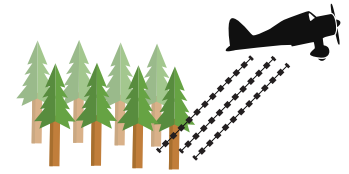


Is the ability of a pest to develop a tolerance to a pesticide and therefore not be affected by its use.

There are now strict Forestry Standards for pesticide use.



With local and international laws dictating what is allowed to be sprayed.



SOUTH AFRICAN LEGISLATION

Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act
(Act No. 36 of 1947)

National Environmental Management Act.
(Act No. 107 of 1998)

Occupational Health and Safety Act
(Act No. 85 OF 1993)

INTERNATIONAL LEGISLATION

Rotterdam Convention on the Prior Informed Consent Procedure (PIC) for Certain Hazardous Chemicals and Pesticide in international trade

Vienna Convention on the Protection of the Ozone Layer and the Montreal Protocol on Substances That Deplete the Ozone Layer

Stockholm Convention on Persistent Organic Pollutants (POPs)

THE RESULT

Changed from hazardous pesticides to less toxic, target-specific alternatives.

In the last 8 years the number of FSC prohibited pesticides has gone from:

2007 → 2015
87 → 389

INTERNATIONAL CERTIFICATION

FSC® Standards and Policies

Other Certification Bodies

Reduction in pesticide reliance

With reductions in the quantities being used.

More efficient pesticides.

Advances in silviculture.

More focus and use of biocontrol.

