

The Efficacy, Economic and Mitigated Impacts of Low Volume Foliar Applications

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Whether vegetation management requires the control of native brush or the control of exotic species such as salt cedar or *Arundo*, the control of these species is a means to an end in that control is necessary for the restoration of habitat or industrial site it has invaded. It is important that the control methods provide maximum efficacy on target species with minimal impact on the surrounding environment. Stalker (active ingredient, Imazapyr) was recently registered in the State of California. This herbicide is a valuable tool for the control of brush such as oaks or eucalyptus. It is also valuable for the control of exotics such as salt cedar (tamarisk) or arundo.

The foliar efficacy of Stalker on target species is excellent. The environmental compatibilities and favorable toxicology profile minimize the impact to the environment.

The method of application can dramatically influence the impact a particular treatment will have on the surrounding environment. Low volume foliar and basal treatments allow for targeted, focused, applications that provide maximum control with minimum off target impact. Key to the success of these applications is the proper application technique, the appropriate herbicide, and the appropriate combination of surfactants.

Required application equipment consists of a backpack, low volume flat fan nozzles such as 2504, 4003, or adjustable cone nozzles such as an X-2 or a Y-2. Concentrations range from 3 to 5%. Applications volumes are less than 10 GPA. Applications are made to the upper portions of the target plant with coverage not exceeding 30%.

Once treated plants need to be left in tact for 1 year or more. Efficacy will become evident over a period of two to three months. It will be first evident in the upper portions of the plant in the apical meristems. Although the plant remains, it is no longer in competition for resources. Additionally, the remaining plants can provide shelter for emerging or planted native seedlings. After one year, target species may be removed.

Low volume foliar applications provide an economical, efficacious method of controlling brush and exotics. Stalker, applied using a low volume foliar application method, provides an excellent tool for vegetation management in industrial sites or for habitat restoration projects.