

Proposed Herbicides

- Glyphosate** Glyphosate is a broad spectrum, versatile herbicide. It can be used on a range of species from grasses to trees and methodologies from foliar treatment to direct cut and paste method application. The majority of proposed works under this contract will be using direct targeted application with foliar treatment only being undertaken on limited species. Glyphosate is known to become 'deactivated' once in the soil strata by bonding to charged soil particles within clay soils, particularly in lower pH environments. Glyphosate is also known to degrade in soil and within vegetation biomass within short periods of time. The majority of sites and soils on Waiheke are known to be clay based with low pH meaning slightly acidic.
- Metsulfuron** Metsulfuron is a herbicide commonly used in controlling species with strong underground biomass, root systems. The mode of action targets the physiology of root systems and is very effective on species that have bulbs or tubers such as Smilax and Arum Lily. This herbicide does not readily affect monocotyledons such as grasses and other graminoid species. Metsulfuron-methyl is relatively versatile being applied in direct application and foliar treatment. It is proposed that only two species have foliar application.
- Picloram** Picloram is an effective herbicide in the control of woody weed species such as Woolly Nightshade. The mode of action targets the cell walls within the plant. This herbicide is relatively versatile and can be used in both direct application and foliar treatment, however, under this proposal only direct application through cut and paste is considered. Given the species distribution and site characteristics, foliar treatment is not regarded as necessary. The utilisation of Picloram greatly increases effective control of woody species across more seasons and weather conditions compared to other herbicides. Control of woody weeds can occur in cooler months as opposed to only in high growth periods such as spring. This product is of very low toxicity to animals and bees and does not bio accumulate.