



Herbicide-wiping tool and its application for selective control of bulbous weeds

The tool that HFNC adapted (by fitting small pads cut from kitchen sponges to the rubber cups) is a “**Pick up – Reaching Tool**” obtained from *The Reject Shop* (imported by TRS Trading Group, 245 Racecourse Rd, Kensington, Vic 3031). We fixed the pads to the cups with a thick wool thread, after drilling 4 holes near the edge of the rubber cups. The pads are then trimmed to size and shape. If this type of tool is not available then pads can be attached to long-handled tongs.

The tool has a pistol grip and trigger to operate the jaws. It is cheap (\$3), lightweight, fairly robust, easy to use and very effective since both sides of the leaf or stem are contacted. Simply grasp the plant near the base and lift. No bending is required and many thousand plants can be treated quickly without strain to the back or hands. The tool can be used to dab the leaves of garden escapees such as *Oxalis purpurea*.

The pads are dipped into a container that holds the herbicide-wetter-dye mixture. We use plastic containers that originally held produce (honey or rice), obtained from supermarkets. The opening of the container need not be great but must allow the pads to be inserted (use the trigger to press the pads together to allow this, then release the trigger to allow the springs to enter). Drill a hole in the centre of the container lid to attach it to the container by a cord, so that it can be more readily closed for transport.

Sparaxis, Cape Tulip, African Weed Orchid, Wild Gladiolus or other weeds of similar structure are individually wiped with a concentrated herbicide solution (*Metsulfuron methyl*, 1 g/L, *Glyphosate* 30 mL/L, surfactant 5 mL/L, dye 5 mL/L) using this tool to deliver herbicide to the pest plant without contacting other plants. Note – 1 g of *Metsulfuron methyl* powder (Ally=Aim=Brushoff) is about ¼ kitchen teaspoon measure. Omit the *Glyphosate* if there are adjacent native species (incl. most native grasses) that cannot be avoided and that would be affected, or if it is considered that *Glyphosate* will only kill the top but not the bulbs. *Metsulfuron methyl* has a very low toxicity to mammals and is safe to handle. It should kill the bulbs, but slowly. *Glyphosate* speeds up the kill, a necessary attribute if the plants have flower heads and would otherwise set viable seed before dying off. *Metsulfuron methyl* solution may become inactive if stored, so only prepare a small volume for immediate use (e.g. 1 L may be enough for one day).

The objective of herbicide-wiping is to kill the pest plants but not adjacent native species (e.g. orchids and native lilies) that are often closely associated. Broad-scale spraying of Cape Tulip and other weed species results in all of the native species in the spray zone being killed, thus creating a vast amount of bare ground that grows only Cape Tulip and other weeds in the following year. Nor does it actually kill all of the Cape Tulip plants in the spray area because these plants are difficult to hit with spray and the stem/leaf surface does not wet easily. The same applies to many other bulbous species, such as Wild Gladiolus.