

## Weeds in the Plots - by Art Delahey, CPLS Newsletter #80:2-3

One of the banes of lily enthusiasts will forever be WEEDS! They have that troublesome ability to grow close enough to the lily stem that an inadvertent swipe with a hoe can bring tears to your eyes. So we resort to a lot of back-stretching exercise otherwise known as hand-weeding.

In plots out here at Riverside Gardens I have tried over the years to minimize the number of weeds that actually get to set seed. Not easy but if you can do it year after year then you notice the weed population thinning considerably. I'm to the stage where three passes annually with the hoe, as I check the variety markers and the growing conditions, will further thin the ranks.

When CPLS took over responsibility for the Dingwall/McKercher plot we soon realized we had a major weed problem. Common groundsel (*Senecio vulgaris*) had infiltrated the plot and was in the process of taking over. Dandelions (*Taraxacum officinale*), brome grass (*Bromus inermis*), quack grass (*Agropyron repens*) and annual sow thistle (*Sonchus oleraceus*) were also thriving in the rich silty loam. In our first year we managed to hire some student labour to remove the weeds - a move that proved costly to CPLS and not really effective in reducing the production of weed seeds. So a new tack was required unless we planned to have most of our membership getting older quicker in the years to come.

In spring 1997 we decided to try a herbicide program for weed control. Since the first and most troublesome weed to deal with was the groundsel, the plots were sprayed late May/early June with Buctril M, one of the few herbicides to control groundsel. This also knocked down other annual weeds such as red-root pigweed (*Amaranthus retroflexus*) and lamb's quarters (*Chenopodium album*). A follow up spraying was made in September (would have been better in August) to get the groundsel which had germinated during the summer.

In the fall the plots were sprayed with Round-up one of the safest and most effective herbicides available to us. After the lilies had matured and started to ripen it was possible to spray the perennial weeds in amongst the lilies without fear of wiping out our stocks. The spray was directed in general over the lily row at a height which covered the entire weed. At last report the dandelions, grasses and thistle were not looking happy. Round-up is most effective when applied in the fall as plants are storing nutrients in their roots at that time. The chemical is taken into the root system and it kills the roots over winter.

All chemicals were mixed at the rate of one ounce per gallon of water, and applied with a two-gallon hand sprayer which had an adjustable nozzle. The work can be done fairly quickly especially if a water supply is close at hand. Unless you are agriculturally based it is difficult to come by these farm chemicals unless you buy them in suitable quantities. Home-garden products made from concentrated chemical are available from nursery centers. These are diluted versions so you will have to check the label instructions to ensure the correct dosage.

In spraying a lily plot care has to be taken to direct the spray at the base of, and across, the lily stem to provide coverage. A narrow spray from a nozzle held as close as possible to the soil level, and yet high enough to cover the weed is mandatory. Extreme care obviously has to be taken where there are small seedlings. In late fall when stems are dying/drying the entire lily can be sprayed without fear of damage.

The success of our initial program was evidenced in no outlay of funds for weeding labour and a cleaner plot in 1997 than we had in 1996 with hand-weeding. To our knowledge no hoes ever entered the plot last summer and we plan to keep them out in 1998.