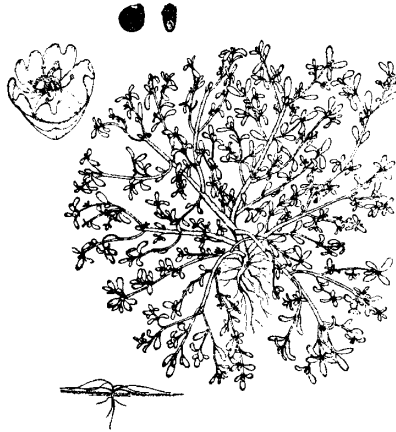


*Figure G:
Purslane
(Portulaca
oleracea) is
a persistent
weed that
reproduces
both
vegetatively
and by seed.*



Eco-friendly herbicides

The phenomenal success of Roundup® (glyphosate) herbicide can be traced to the fact that it is not only very effective, but it safe to use and not a threat to the environment. Even some organic farmers who normally shun all chemical pesticides have begun to experiment with it as part of an IPM program. Now, another eco-friendly herbicide has hit the market. Finale® (WipeOut® in Canada) has very similar properties to Roundup®-acting by disrupting the metabolism of weeds, not poisoning them. The active ingredient is glufosinate-ammonium, which inhibits the production of an enzyme leading to toxic accumulation of ammonium within treated plants. When Finale® is applied to the leaves, browning becomes visible within 2 days and the weed is dead in a week. It acts fastest in full sunlight, and becomes resistant to rain only four hours after application; but more importantly, for IPM reasons, is its advertised safety for humans and the environment. Glufosinate-ammonium has fairly low toxicity rating for humans and animals, and becomes inactive when it hits the soil, where it biodegrades rapidly, leaching only 15 cm (6 in). This means that it can be used as a preplant, with wick applicators, or with shielded sprayers between the rows. I'm not sure about the status of EPA registration for nursery crops, but it sounds like it's worth looking into.

Source:

Anonymous. 1995. HortIdeas 12(2): 22-23