Common Purslane Biology

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July appears to be the period of maximum emergence of common purslane (*Portulaca oleracea*) see figure 1 below. Purslane is considered a summer weed with peak emergence occurring during warm weather. Purslane seeds are small and germinate best from the soil surface and from very shallow soil layers <0.25 inches. Purslane seed have the lowest level of dormancy during July when we see large flushes of this weed. It is best to cultivate purslane when it is very small – within the first 3 weeks, as uprooting will generally kill the small seedlings. Starting at 4 weeks purslane becomes harder to control. We found that uprooted 4, 5 and 6-week-old purslane plants could produce viable seed while 1, 2 and 3-week-old plants could not. Purslane primarily reproduces from seed, however, older plants can re-root when irrigated whether as whole plants or plant fragments. This ability of purslane to survive uprooting is the reason that some growers pay weeding crews to bag the uprooted weeds and carry them out of the field. This of course is expensive given the cost of hand weeding labor. The best way to manage purslane is to reduce the weed seedbank and use preemergence herbicides to prevent establishment of this weed.

*Figure 1.* Salinas valley common purslane emergence by half-season in the field and nondormant percentages in the soil seedbank during September 1999 to September 2000. The early summer half season is the period June 21 to August 5.