**Supplementary materials**



Supplementary Figure 1. Rank-abundance curves for weed species present in chile pepper. For each species, density is calculated as the sum of weed seedlings in noncover control plots from Weed Count 1 to Weed Count 3. POAsp = annual grasses. At Leyendecker, annual grasses were *Echinochloa colona* and *Setaria pumila*. At Los Lunas, annual grasses were primarily *Eragrostis cilianensis*. PHYWR= *Physalis acutifolia*; AMAPA = *Amaranthus palmeri*; ANVCR = *Anoda cristata*; PHBPU = *Ipomoea purpurea*; CYPES = *Cyperus esculentes*; EPHPT = *Euphorbia prostrata*; TRBTE = *Tribulus terrestris*; SASKT = *Salsola tragus.*