Fig. 1. Promoting the technique of strip-till of sunn hemp cover crop and clipping of living mulch as surface mulch (STCC+SM) for soil health management (http://www.ctahr.hawaii.edu/sustainag/Downloads/Strip-till_row-switching.pdf).

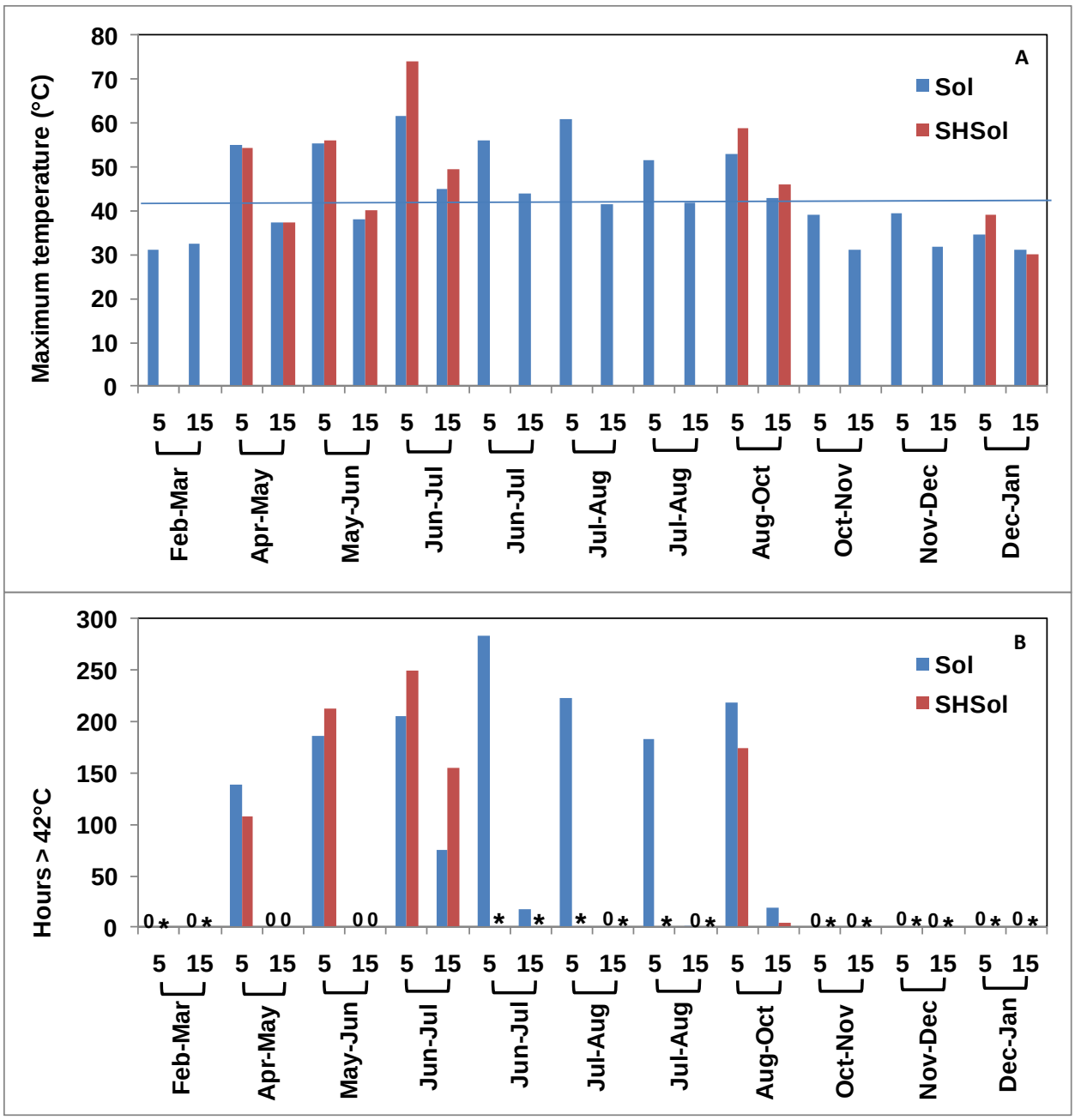

Fig. 2. A) Maximum temperatures and B) hours above 42°C accumulated under solarization (Sol) and sunn hemp cover cropping followed by solarization (SHSol) treatment over a 6-week period measured at 5 and 15-cm soil depth. Eleven solarization trials were conducted throughout the year in Hawaii. Some of the sites (indicated with *) do not have SHSol treatment. 0 indicates 0 hours accumulated above 42°C (lethal temperature for root-knot and reniform nematodes). The horizontal lines in A) is 42°C.

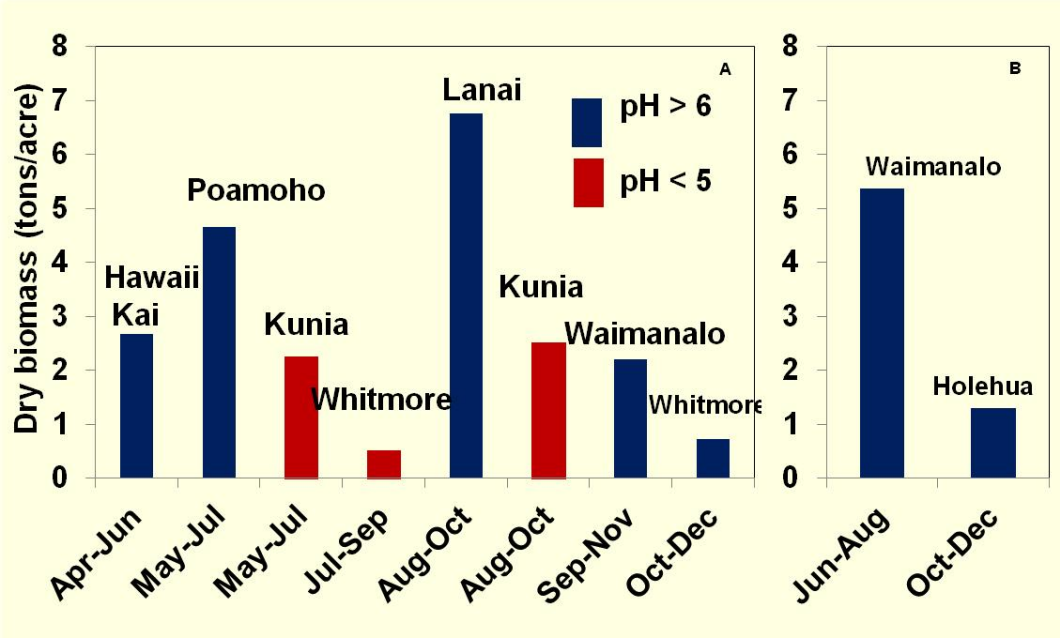

Fig. 3. Sunn hemp dry biomass accumulated at 2 months after planting from a series of farms located on Oahu and Molokai. Name of places are labeled on top of each bar. Sunn hemp was seeded at A) 30 lb seeds/acre, or B) 60 lb seeds/acre. Soil pH in most fields are > 6 except for fields in Kunia and Whitmore with pH < 5.

Fig. 4. Weeds coverage in solarized vs non-solarized plots about 3 weeks after removing of solarization mulch, and flushing with irrigation water.