

CLAM SHELL insect sampler allows absolute insect population estimates







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CLAM SHELL SAMPLING DEVICE SHOWN in photos here (and cover) offers an absolute population sampling method for quantifying D-Vac suction surveys on a unit-of-row or area basis. The device will collect insects and spiders from a 3-ft segment of a row crop such as cotton. The frame is fabricated from aluminum and has collapsible supports to hold the bag away from the plants. The collecting bag is of organdy with two halves faced with Velcro self-sealing nylon strips to form a complete seal when placed together, and with foam tabs to hold the bag to the frame. Trimming plants around the 3-ft section of cotton row a week before sampling helps obtain a uniform sampling unit without interference from long branches. Top photo above, right (and cover), shows careful placement of two

halves of sampler around cotton plants. Top photo above, left, shows removal of filled sampling frame and bag (after severing the plant stems at ground level and pushing them into the bag). Lower photo, left, shows removal of sampling bag from frame for placement into anesthetization chamber. Photo above, right, shows plant material of sample (with anesthetized insects), which is then cut up and funneled into a collecting bag for later laboratory processing, counting and identification of insects. Observations to date indicate very few insects escape the device, and several species not ordinarily detected through sweeping or D-Vac sampling have been taken-Thomas F. Leigh, Davis, Daniel Gonzales, Riverside, and Robert van den Bosch, Berkeley (Entomology and Biological Control) University of California.