'Bugging' Job Goes 2 Ways In Pest Control

Story and Photos By Leo Dollar

Integration. It's a word we hear more every day. It is even becoming the name-of-the-game in fighting off the bugs trying to do us out of our food and fiber crops.

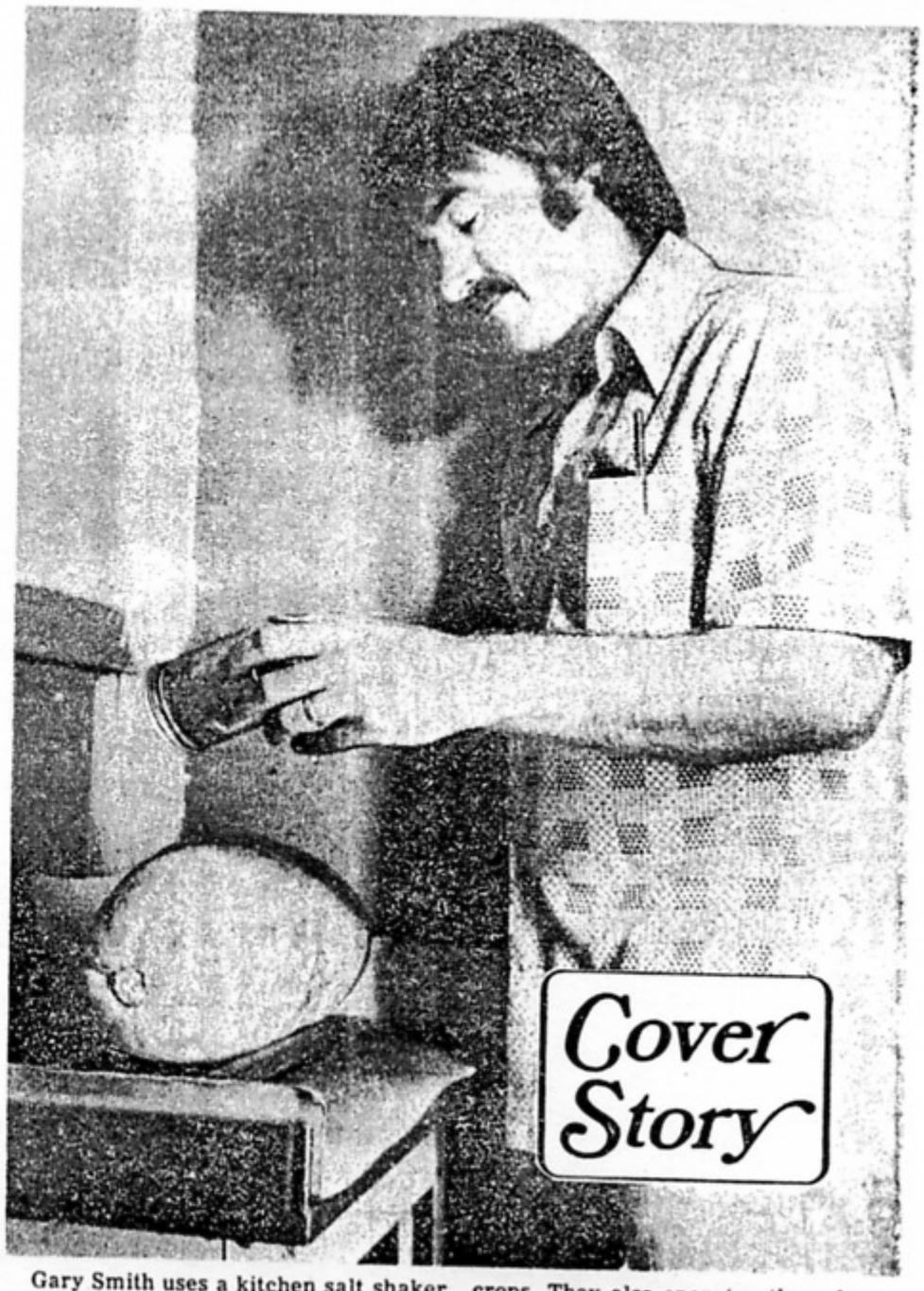
Environmentalists' pressures and new laws squeezing down on our potent modern pesticides are forcing today's up-to-date farmer to join the mopement...like it or not. The simple fact of staying alive economically is one of the strongest arguments for "integrated insect control" that teams hordes of hand-raised beneficial predatory or parasitic insects with carefully timed spray or dust programs to create the highest possible "kill factor" against our common cropland enemies. With land, labor, water, fertilizers, pesticides and tools becoming more costly day by day, any way to make any one of them work better must be followed...and integration appears to be one of the best.

One of the latest additions to this ultra modern approach is the compact laboratory and insectary (a special nursery for raising the armies of beneficial biological warriors) operated by Ibrahim F. Michael and Gary Smith on the Clovis Avenue edge of Fresno's air terminal property. Michael Pest Manage-

See Bugging Page F-12

A microscopic census of male red scale insects trapped on the sticky cards of an orchard survey trap is tallied by Darllynne Michael to keep tab on any increase in the hatch of the pest in citrus. A clear plastic grid, like the one standing liue a teepee at left, is marked for the random squares from which she takes the counts with the mechanical counter in her left hand.

Ibrahim F. Michael, who set up his Michael Pest Management in 1973 as both a supplier of beneficial insects for pest control and traps for determining pest infestations, shows potatoes carrying hatches of tuber moth to be used as sex lure in field traps to determine timing for sprays.



Gary Smith uses a kitchen salt shaker to dust a new colony of Aphytis melinus parasitic wasps on the rind of a banana squash in the insectary where he and Michael breed beneficial insects to quell pests that "bug" our crops. They also operate other chambers nearby (though in isolation) to breed the pests themselves, red scale and tuber moth, to provide bait for their survey traps.