



Selected Regional Impacts

Leptospirosis is a waterborne disease of significant concern throughout temperate and tropical regions of the world, including the Pacific islands. Ongoing work of the Regional Program has focused on animal waste management, specifically waste from pigs which are common throughout the Pacific and are potential vectors of the pathogenic *Leptospira* bacteria. While initial work focused on changing behavior to eliminate practices that wash wastes directly into waterways, recent research has focused more specifically on composting pig wastes and determining conditions under which *Leptospira* do not survive. Long thought to be an effective tool for managing animal wastes, agricultural assistance agencies have been reluctant to recommend manure composting to farmers because of the uncertainty of *Leptospira* survival in compost. With research data that now shows specific conditions under which spirochetes will die, instructional materials can now be distributed to encourage composting of pig manure to Pacific island farmers.

Additional Highlights

Dry Litter Waste Management (DLWM) - Regional work has continued in promoting and building dry litter waste management systems for small-scale piggeries in the islands. This alternative to traditional liquid waste management practices of small/family piggeries that frequently send animal wastes directly into surface waters or leaves them untreated and susceptible to leaching nutrients and pathogens, has now spread throughout the region. As a result of the collaborative efforts and relationships built between the Northern Marianas College - CREES team and the local NRCS office in demonstrating and promoting the DLWM, NRCS agents are now actively advertising the Dry Litter System for Managing Hog Waste as a potential system to be cost-shared under the NRCS-EQIP program. At least two applicants have been approved for EQIP and the systems for these farms are being designed and approved by NRCS engineers; one site is near completion.

Coordinated Management of Water Quality and Food Safety - Recent concerns about food safety, particularly of leafy green vegetables, have led to industry recommendations and restrictions on farm practices. Some of these recommendations, however, are in stark contrast with long held water quality management practices. To highlight this disconnect and foster a concerted effort to bring the two sides to common ground, the Region 9 program co-sponsored a conference dedicated to this issue for water quality and food safety researchers and professionals. Follow-up from the conference has included a survey of participants to identify research priorities and next steps which will be pursued in the coming year.

On the web at: <http://ag.arizona.edu/region9wq/>

