Cover Your Asset With Cover Crops

Maui organic farmer Gerry Ross describes his cover cropping approach in a field of oats and vetch at his farm in Kula.

Perennial peanut is a low growing nitrogen fixing ground cover often used by fruit tree growers.

Organic agriculture treats the farm as a whole system that integrates soil, plants and animals, people, and the environment to sustain production over the long term. In this holistic way of thinking, all parts of the system are essential to sustain it, but soil receives special attention because of its broad influence on the farm ecosystem — and because of our tendency to overlook its importance in the past.

Soil is a precious resource on any farm and organic farmers are especially aware of this. The term "soil health" in agriculture refers to the ability of soil to support plant growth and is dependent on many physical, chemical and biological properties. Adding and conserving organic matter in the soil is a primary strategy to build and maintain soil health. The National Organic Program (NOP) rule (205.203b) states: "The producer must manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials." Cover-cropping is a particularly valuable tool because it contributes to soil health in many ways and can also enhance biodiversity above ground by providing a habitat for beneficial insects, suppressing weeds and breaking pest cycles.

Cover-cropping is an ancient strategy, but, in recent times, organic farmers have been especially vocal advocates for cover-crop research and use. All growers interested in sustainability continue to increase their adoption of cover crops and today our largest users of cover crops in the state include the seed industry. Organic growers must follow NOP practice standards when purchasing crop cover seeds (NOP 205.204).

Cover-cropping is just one tool and it takes the thoughtful, appropriate integration of many tools to build sustainable systems. Organic producers approach sustainability in a very specific way; they "respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity (NOP)."■

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Resources

UH/CTAHR Covercrop Database
http://www.ctahr.hawaii.edu/sustainag/Database.asp

Oahu Resource Conservation and Development Council Cover Crop Handbook
http://oahurcd.org/wp-content/uploads/Cover-Crop-Handbook-Final_Oct-2011.pdf

NRCS covercrop and other conservation practices
http://www.ctahr.hawaii.edu/sustainag/news/articles/V6-NRCS-CCfunding.pdf

USDA National Organic Program (NOP)
http://www.ams.usda.gov/AMSv1.0/nop