What research are you working on that is related to weed control for crops grown on the Central Coast?

One project was recently completed, *Central Coast vineyard floor management practices and economics.* This project was initiated because farmers of irrigated agriculture along California's Central Coast are under increasing scrutiny and regulatory pressure to manage herbicide use so that it does not contaminate groundwater or run off into the waters of the Monterey Bay National Marine Sanctuary.

Basic to the floor management practices in coastal vineyards is the combination of weed control, which often includes herbicide use and cover crop systems. Both affect productivity, ease of operations, and costs. For growers to evaluate new production techniques, and to make informed business decisions that have a dual purpose of supporting profitability while protecting and enhancing water quality, access to research-based information demonstrating impact on crop yield and quality, as well as cost, is essential.

UC Cooperative Extension farm advisors in Santa Cruz and Monterey Counties undertook a 5-year study on floor management practices and economics for coastal vineyards. Supported by grants from the California Department of Pesticide Regulation, the Viticulture Consortium Program, and the USDA Western Region Sustainable Agriculture Research and Education (SARE) Program, the research was done in collaboration with coastal growers, industry, and various researchers.

Weed populations, and cover crop and floor management practice costs varied by year in response to differing levels of weed pressure and timing of practices. For most years, results show that good weed control can be achieved, with no negative impact to fruit yield or quality, when smaller amounts of herbicides, including a smaller amount of a higher risk herbicide, are used in comparison to the current grower standard. The accompanying costs to growers were also generally lower.

This research provides Central Coast vineyard growers with new information to assist in selecting floor management practices and cost strategies that sustain crop yield and quality, while using production techniques shown to assist in reducing negative impacts to water quality.

Please contact our office in Watsonville if you would like additional information.