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ADOPTION OF IRRIGATION SCHEDULING: ROLE OF EXTENSION AND TRAINING IN CENTRAL CHILE

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Abstract

This article applies a Logit regression model to examine the factors that contribute to the adoption of irrigation scheduling by small-scale farmers in Central Chile. Socioeconomic and productive information was collected from a random sample of 112 small-scale, irrigated farms during the 2010/2011 season. One important feature of this research is the specific extension and training in irrigation scheduling received by some of the farmers. Irrigation scheduling consists of estimating the optimum water application (irrigation timing and frequency) by using information about soil, crop, and climatic conditions. Model results show that training increases the likelihood of adopting irrigation scheduling; however, extension visits show non-significant results. Results also indicate that farm size, production system, access to credit, and use of pressurized irrigation are important variables associated with adopting irrigation scheduling. From a policy standpoint, results show that if pressurized irrigation is adopted (i.e. drip or sprinkler irrigation) scheduling is more likely to be adopted as well. Another relevant policy result is that training is more effective in inducing farmers to adopt irrigation scheduling than an intervention process through extension. It is recommended that extension projects involve intensive training.

Key words: irrigation scheduling, technology adoption, small-scale farmers

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