

Evaluation of the Large-scale Organic Transition Process of Blueberry Orchards in Chile from an Agroecological Perspective

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Abstract

In the last couple of decades there has been a considerable growth in the area cultivated with berries (mainly blueberries and raspberries) in south-central Chile. This has been carried out by firms rather than individual farmers, under conventional management of their orchards and with the aim of exporting fresh or frozen fruits (IQF).

In 2004, a participatory process between owners, firms' technicians and workers, and the Center of Agroecology and Organic Agriculture of the Universidad de la Frontera in Chile was begun. Since then, a transition process from conventional to organic production (from an agroecological perspective) has been planned and applied to approximately 1,200 hectares of berry-producing orchards. A system of holistic evaluation and monitoring was developed during this process, based on sustainability criteria (including economical, ecological, and social aspects) and adapted for agricultural systems managed as businesses (firms) rather than for farmers.

Based on the integration of the variables measured, it was possible to conclude that in organic (agroecological) systems, the productivity and utility levels were the same as or larger than in conventional systems, the pest and disease incidence (including the quarantine ones) was reduced, the energetic consumption and external inputs dependence was reduced, the quantity and diversity of soil organisms, predators, and birds was increased, and the numbers of jobs offered to the community was greater and the workers' welfare was better. In conclusion, the transition process to organic berry production increased the sustainability level of the agroecosystems and reduced considerably its negative externalities. Nevertheless, the process of concentration in land that occurred in the area was not reduced and was possibly increased owing to the crematistic success.

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