

Participatory action research for weed management

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Living mulches may represent an interesting tool for weed control for organic and low-input arable farmers. However, a major challenge is to implement novel practices in a complex agricultural world, where multiple and sometimes contrasting views arise. Our aim was to study the socio-economic issues related to living mulch application, and to trigger the first Participatory Action Research group in the area. In spring-summer 2015 we performed fourteen semi-structured interviews with farmers, technicians and academics, and we set up an on-farm trial to test different living mulch options for common wheat. We organized focus groups with stakeholders with the objectives of defining the trial treatments and periodically assess the results. We found that farmers prefer to adopt innovations using a step-by-step approach, and would adopt living mulch if this practice does not interfere with their economic objectives. Farmers often do not have information on weed management due to the lack of public extension services, and they are undergoing a process of fragmentation. As a consequence, farmers are usually left out of decisions regarding agricultural innovations, hence they considered participatory group activities as important moments for their personal learning process. This experience provides a good indication that universities and extension services need to incorporate more participatory approaches in their agenda, especially when adoption of novel, environmentally friendly practices is sought. Activities that encourage the creation of networks of farmers, technicians and consumers may foster innovation in agriculture.