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Herbicide Resistant Weeds: Contrasting Perspectives of Actors in the Agricultural Sector

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Abstract : In the agricultural sector, the rapid expansion of herbicide resistant weeds is a major threat to the global sustainability of food and fibre production. Efforts to avoid herbicide resistance have primarily focused on new technologies and farmer education. Yet, despite decades of advice to growers from agricultural scientists and extension professionals of the need for management strategies for herbicide use, herbicide resistance continues to increase. Technological options are running out and current extension efforts to change farmer behaviour are failing to curb the problem. As part of a five-year, government funded, research programme to address herbicide resistance in New Zealand, social science theory and practice are being utilised to investigate the complexities of managing herbicide use and controlling resistance. As an initial step, we are utilising a transdisciplinary, multi-level systems approach to examine the problem definition, knowledge beliefs, attitudes and values of different important actors in the agri-business sector. In this paper, we report early project results from qualitative research examining the similarities and contrasts in the perceptions of scientists, farmer/growers, and rural professionals.

Keywords: behaviour change, herbicide resistant weeds, knowledge beliefs, systems perspective

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