

Opportunities for area-wide management of cropping weeds: a survey of growers in Australia

Silja Schrader¹, Sonia Graham¹, Rebecca Campbell¹, Kaitlyn Height¹

¹University of Wollongong, Wollongong, Australia

(sonia.graham1@gmail.com)

Summary The mobility of weeds, use of biological controls and spread of herbicide resistance mean that weed management is a landscape-scale problem. Area-wide management (AWM) presents one way to address these challenges by bringing land managers, industry and government representatives together to collectively manage weeds on shared and private properties. Such an approach has been successfully used for other landscape-scale problems, such as managing some animal and insect pests. The aim of this study was to investigate the extent to which growers in three diverse cropping regions in Australia currently engage in area-wide management of weeds and their reasons for doing so. Survey responses of 604 land managers from the Riverina, NSW (n=218), Sunraysia, Victoria (n=200), and the Darling Downs, Queensland (n=186) were recorded between July and September 2021. Almost all (95%) growers agreed or strongly agreed that each land manager has a responsibility to the whole region to control

weeds and 84% agreed or strongly agreed that effective control of weeds requires land managers to work together. Yet only 24% of growers currently work with others on weed management. Growers who are less likely to currently engage in AWM of weeds are those who are less concerned about herbicide resistant weeds spreading to neighbouring land and who are unlikely to share information with other land managers about weeds or attend meetings about local weed issues. To support greater uptake of AWM of weeds in the future will require increased awareness and education about the mobility of weeds, building of new networks among growers and other key stakeholders, and development of AWM activities that are accessible to all land managers regardless of time and financial constraints.

Keywords Community management, collective action, participation, grower cooperation, area-wide control, cooperative weed management