

IIRB Congress:

Current perspectives on weed control and resistance management



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Two papers were presented on the Conviso® SMART system. The system is widely and increasingly used across Europe since 2020 although there are different recommendations for its use in different countries. The system provides many benefits including high efficacy of a wide range of weeds providing flexibility in application and enabling areas with high levels of weed beet to be brought back into the sugar beet rotation. However, there is an increased risk for the development of ALS resistance with ALS inhibiting herbicides being applied to crops throughout the rotation and there remains a yield drag in the SMART varieties compared to conventional varieties. Stewardship of Conviso® SMART is essential, and its use should be incorporated as part of an Integrated Weed Management strategy.

A paper from the UK presented research on resistant weeds in sugar beet in the UK. As part of a project with British Sugar a molecular leaf diagnostic test has been developed for a range of broad-leaved weeds. The test works by sequencing herbicide target genes and searching for mutations associated with resistant traits.

The future for herbicide active ingredients in sugar beet remains unpredictable with it anticipated that some active ingredients will be restricted or withdrawn. This is therefore shifting the focus of research across Europe to consider alternative methods of weed control. A paper evaluating grass weed control in France concluded that active ingredients for the control of grass weeds are essential however their use can be complemented by the use of mechanical weeding which will assist in resistant management. A further paper presented looked at alternative digital technologies for weed control for the future including spot spraying and robotic weeding and where they may play a role to optimise weed management in the future.