

# Effective management of ALS-resistant broad-leaved weeds in a cereal/oilseed rape cropping rotation in the UK



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## BACKGROUND

- European pesticide legislation has reduced number of herbicides - fewer products.
- Heavy reliance on acetolactate synthase (ALS) products.
- Common poppy (*Papaver rhoeas*) resistance increasing in the UK.
- World-wide resistance to ALS inhibiting herbicides is greatest risk.

## AIMS & OBJECTIVES

To develop practical solutions to prevent a wide-scale increase in ALS resistant broad-leaved weeds (BLW's), including poppy, through effective management in a cereal/oilseed rape rotation.

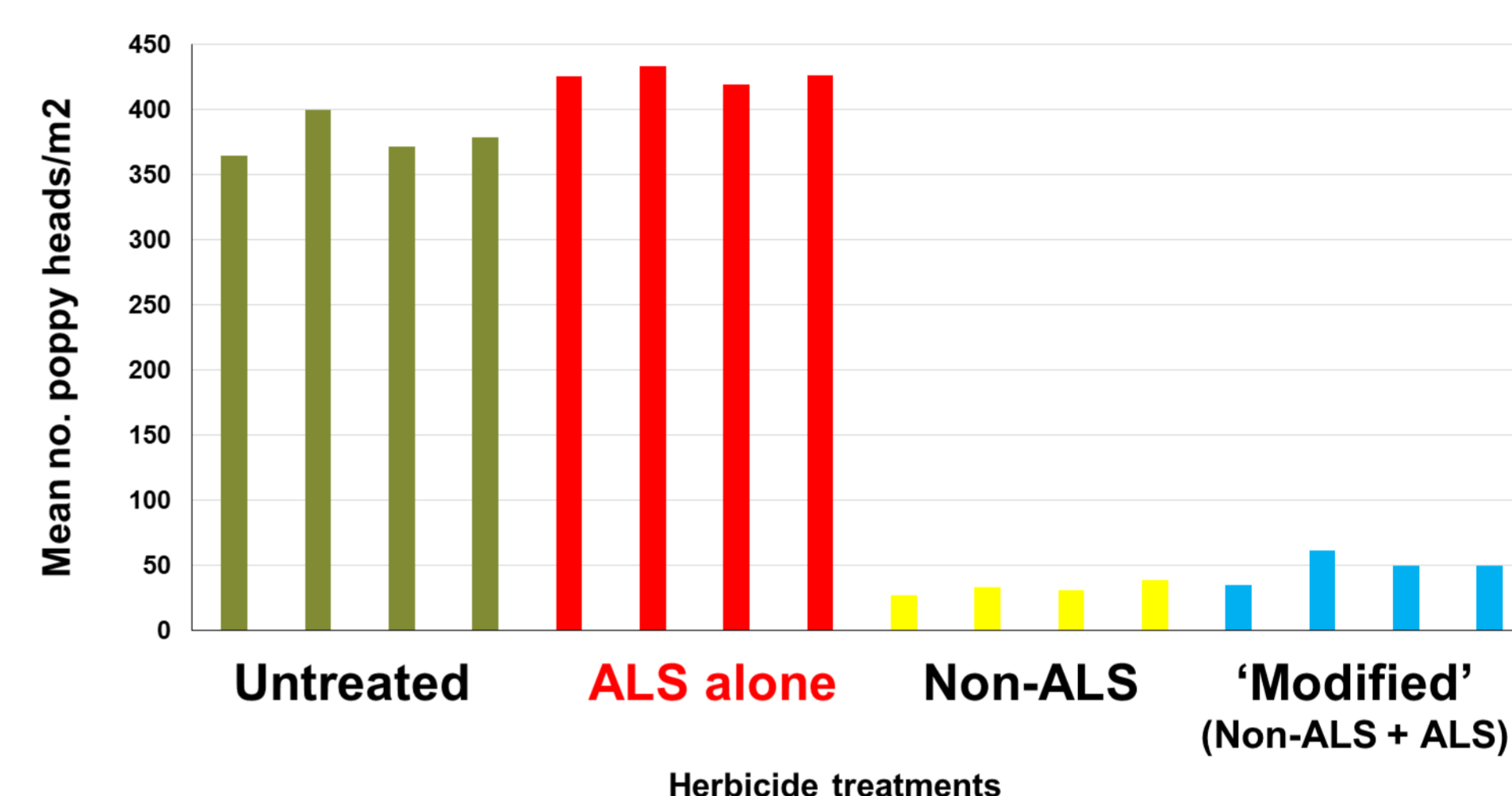
1. Identify + quantify the risks of ALS resistance in BLW's.
2. Develop optimum management strategies to manage, reduce or eliminate resistance risk.
3. Raise awareness of the issue and provide information about early warning signs and how to manage the situation.

## METHODOLOGY

- Container-based and field experiments
- Three poppy populations in containers
- Herbicide treatments from low risk (non-ALS products), to higher risk (ALS products alone)
- Three year cropping rotation (wheat/oilseed rape)
- Annual seed collection and seed return to field plots



## RESULTS



## KEY OUTCOMES TO DATE

- ALS-resistant poppy can be controlled with a non-ALS herbicide as part of a herbicide programme.
- Field and containers trials showing consistent results.
- Non-ALS herbicides have a key role to play as part of resistance management programmes.
- Project will provide agronomists, farmers and regulators with guidelines to evaluate future resistance management strategies

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