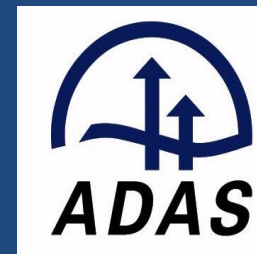




Herbicide resistant weeds in Great Britain (2016)



Species	Farms	Counties	Comment
Black-grass	20,000	37	Widespread
Rye-grass	>475	34	Still a threat
Wild-oats	>250	28	Need watching
Chickweed	>50	13	A threat
Poppy	>70	9	A threat
Mayweed	12	5	A threat
Triazinone resistance in BLW a threat			

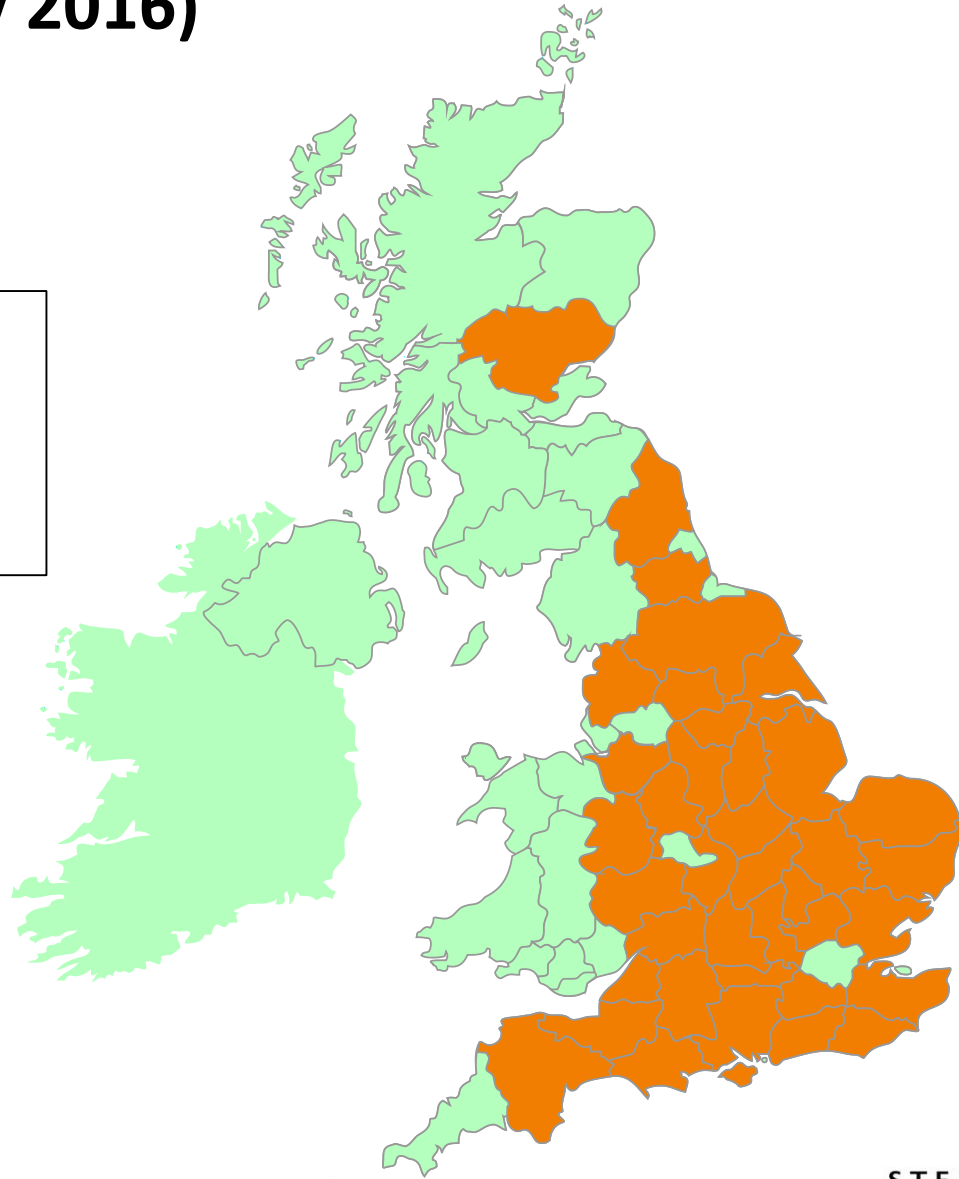
Compilation of data from most organisations/companies testing for herbicide resistance in the UK



Counties with herbicide-resistant Black-grass (by 2016)

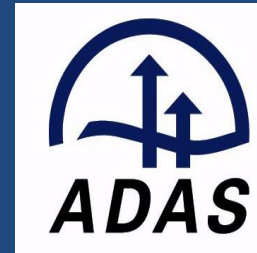
First found 1982

**20,000 farms
in 37 counties**
(Angus and Shropshire added)



Counties with proven cases of resistance to 'Atlantis' (mesosulfuron+iodosulfuron) in black-grass by 2013 ('Atlantis' introduced autumn 2003)

- >700 cases confirmed in 27 counties in England
- ALS target site resistance common - conferred by both Pro₁₉₇ and Trp₅₇₄ mutations
- ALS enhanced metabolism resistance also common
- Both mechanisms now common
- Both mechanisms also affect other ALS herbicides (e.g. pyroxsulam, 'Broadway')
- >75% samples also ACCase ('fop'/'dim') TSR
- Most farmers questioning continued use of 'Atlantis' although complete failure is rare (but does occur)

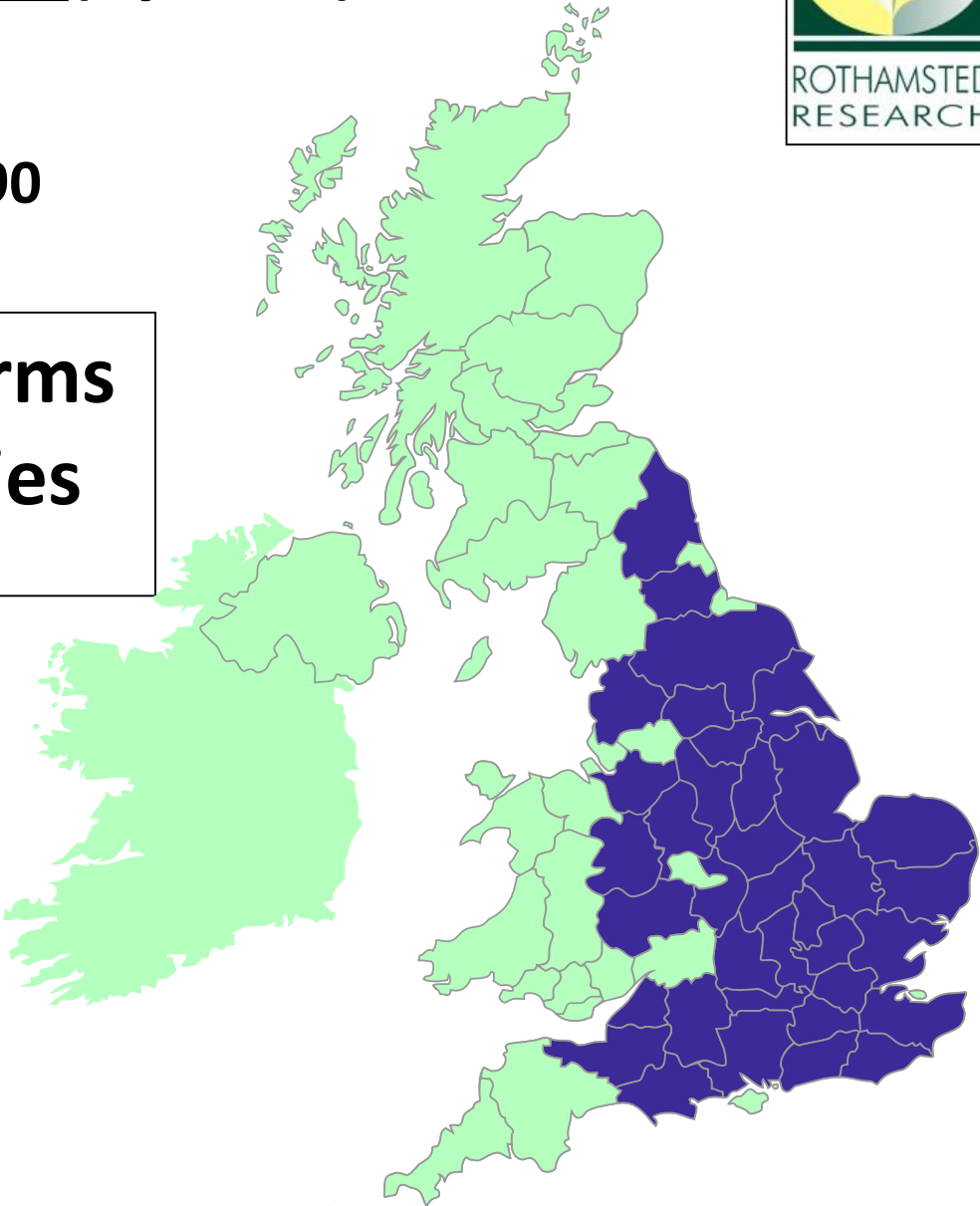


Counties with herbicide-resistant Italian rye-grass (by 2016)



First found 1990

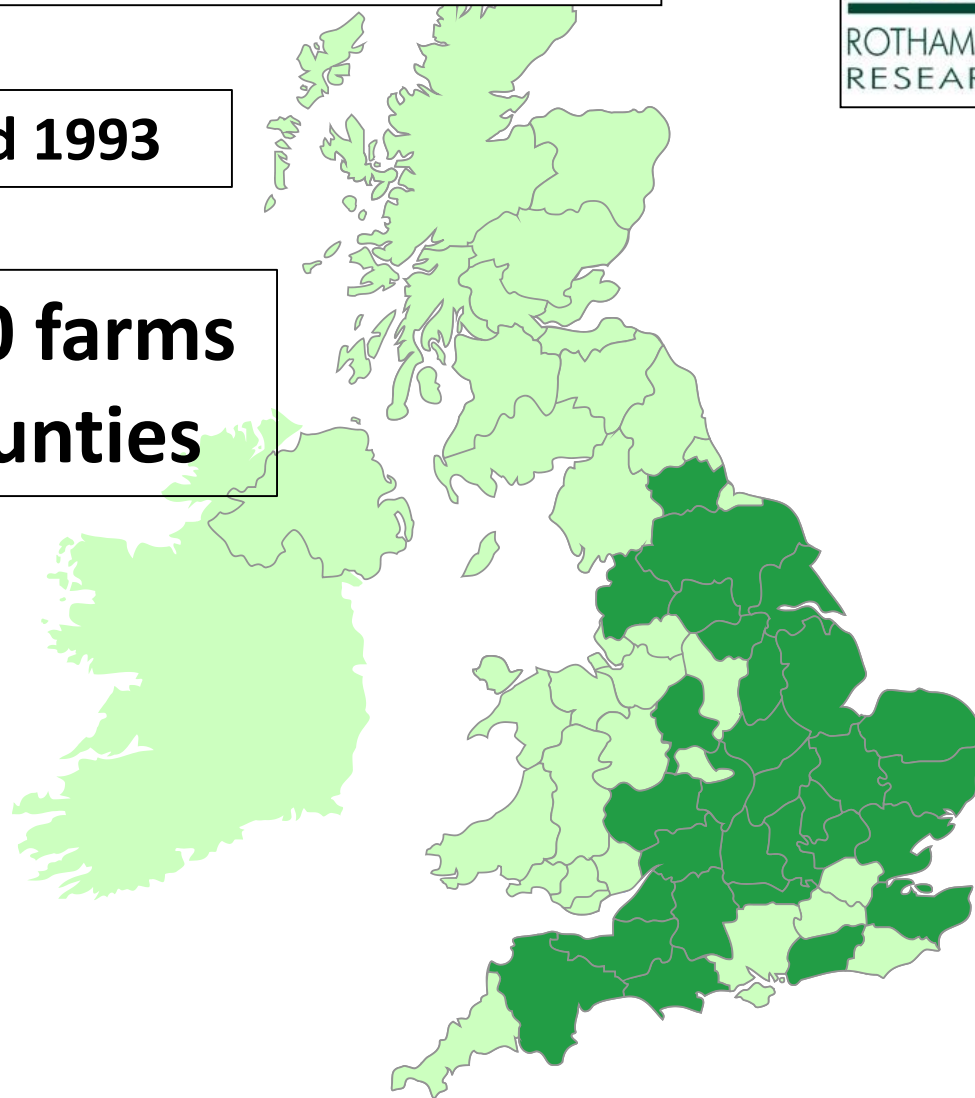
**Now >475 farms
in 34 counties**
(Cheshire added)



Counties with herbicide-resistant Wild-oats (by 2016)

First found 1993

Now >250 farms
in 28 counties

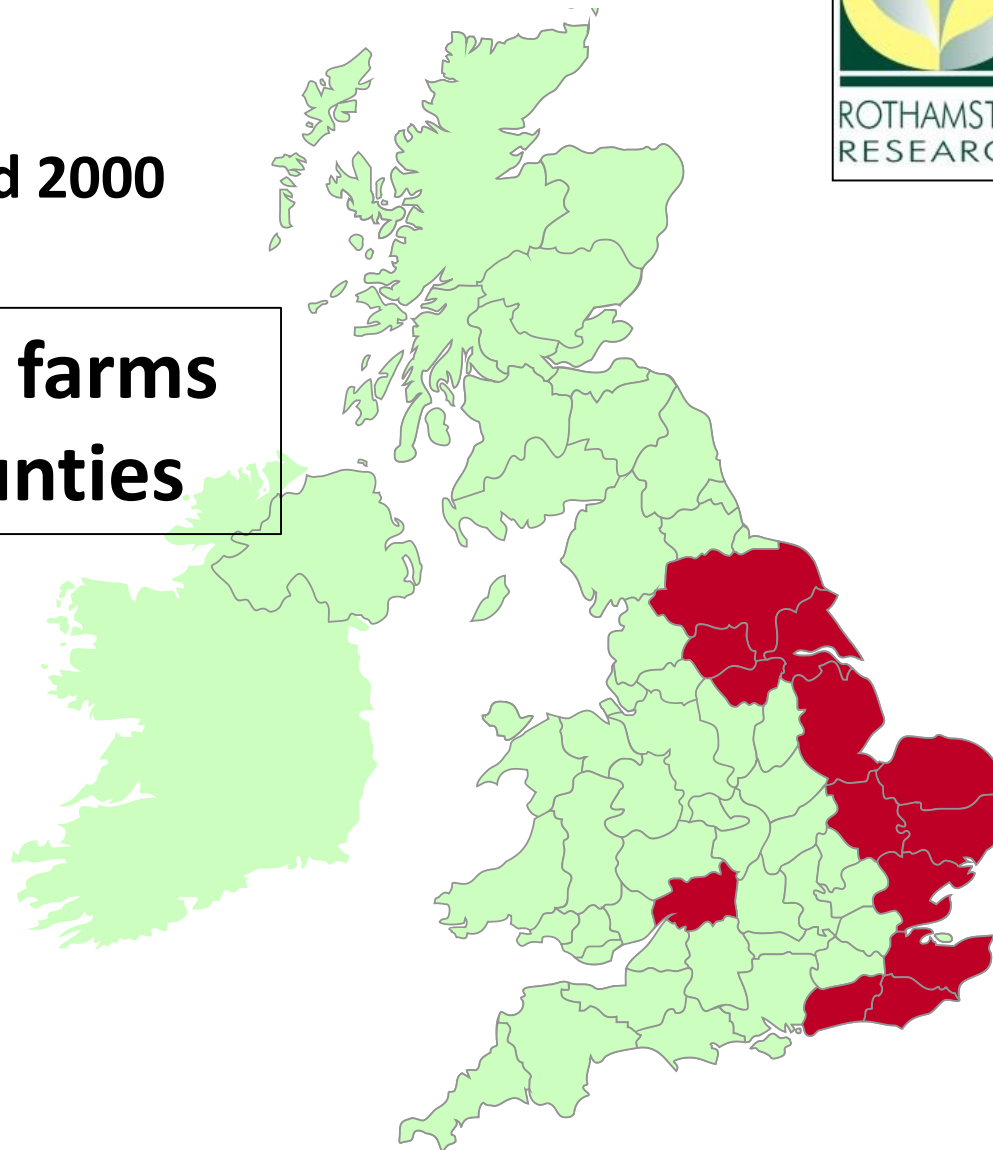


Counties with herbicide-resistant Poppies (by 2016)

First found 2000



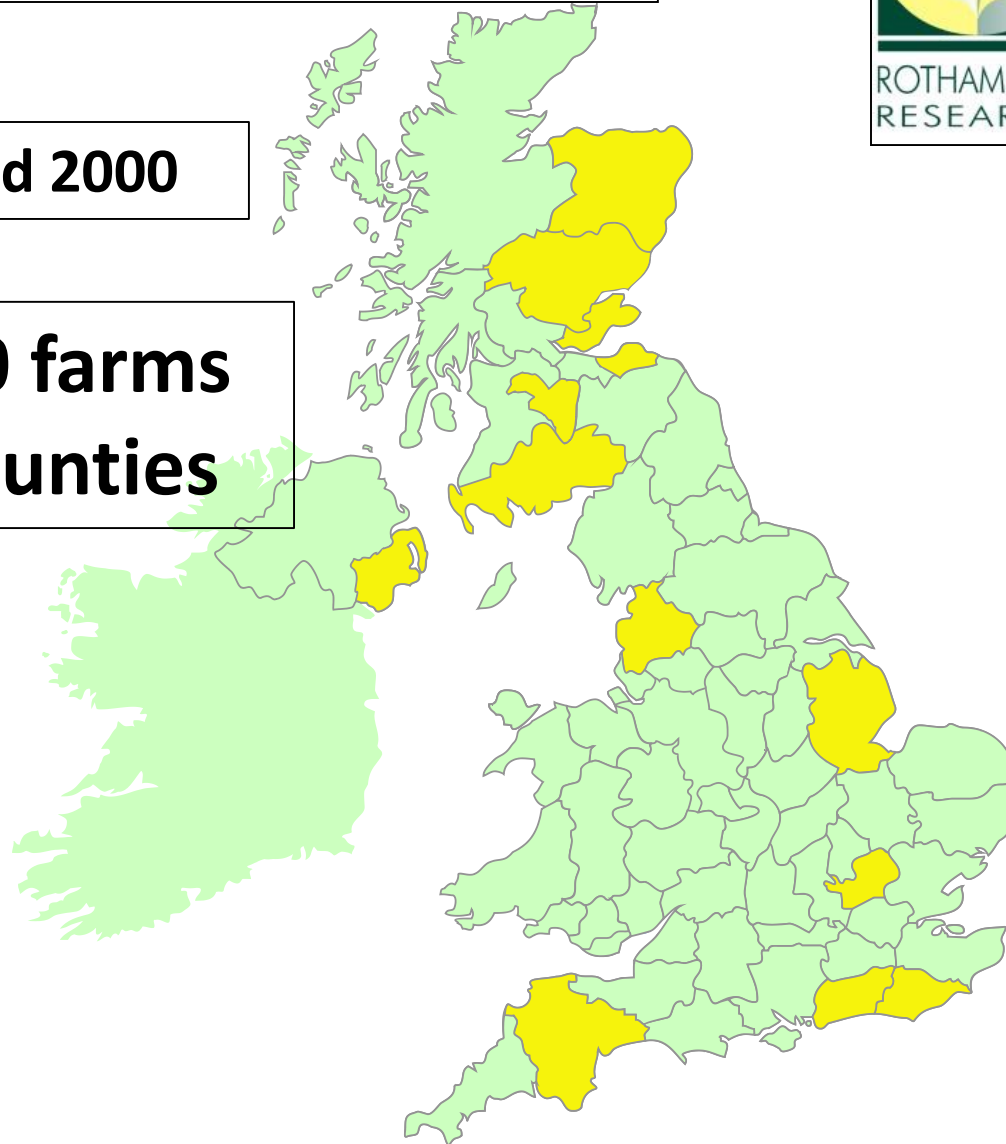
**Now >70 farms
in 9 counties**



Counties with herbicide-resistant Chickweed (by 2016)

First found 2000

Now >50 farms
in 13 counties



Counties with herbicide-resistant Mayweed (by 2016)

First found 2002



**Now >12 farms
in 5 counties**

