

Dormancy in grass weeds, research widened to provide annual information and to cover other species

HGCA have funded a 40-month project to look at dormancy of black-grass, Italian rye-grass, Barren and meadow brome (Project number 3336). This project builds on the findings of previous projects (2469, 3275) which provided an annual forecast of black-grass dormancy and have led to a partial understanding of the impact of seed dormancy on the start of emergence of black-grass. The new project aims to provide an annual forecast of black-grass dormancy to the farming industry and to understand the implications of dormancy on emergence patterns into the winter and spring and to allow optimisation of black-grass management within following crops.

This project extends the earlier work to examine annual dormancy prediction of other difficult to control grass species; Italian rye-grass, barren brome and meadow brome. Within the project we intend to understand the factors affecting dormancy and develop further a predictive system for black-grass at lower annual cost. The work will be led by Dr Sarah Cook of ADAS.

Previous results have tied in well with ambient weather conditions during the ripening phase of black-grass. The results below summarise the findings. 2006 results are similar to those in 2001, 2003 and 2005, all after warmer summers. In all years samples were collected from across the country and we have not identified any consistent regional patterns.

Year	Mean % black-grass seed germinating	Conditions during black-grass seed maturation
2001	62	Hot and dry
2002	22	Cool and damp
2003	57	Hot and dry
2004	28	Cool and damp
2005	59	Warm and damp
2006	53	Hot and dry

The weather in 2007 has led to an extended period of flowering for grass weeds and this may affect the dormancy level.

Can you help?

We are looking for samples of black-grass, Italian rye-grass, barren brome and meadow brome for dormancy testing. If you are interested in becoming involved then contact Dr Sarah Cook at ADAS Boxworth (e-mail sarah.cook@adas.co.uk; Tel. 01954 268215) with your name, address and contact details, we will then send you a sampling pack.

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