



Crop Science

*Glyphosate
Introduction to pre-
harvest*



Mark Buckingham
May 26, 2021



RESTRICTED



Glyphosate: An Evolving Tool for over 40yrs

- First approved in 1974
- Major impact on British farming.
- Positioned firmly in the family of agricultural tools.
- Continually evolving role.
 - 1970s-80s: Couch grass control
 - 1990s: Min-til adoption
 - 2000s: Black-grass control



Pre-harvest Use in Cereals

● Two distinct Uses

● Pre-harvest weed control

- 720g to 1440g ai/ha
- Useful tool for couch grass, bindweeds, thistles, volunteer potatoes etc.
- Less widely practiced than in 1980s due to reduction in couch infestations.

● Harvest Management

- 1.0-1.5 l/ha (360g -540g ai/ha)
- More widely practiced, especially in difficult harvests.
- Benefits widely valued by farmers and grain supply chain



What is Harvest Management?

- Different from pre-harvest weed control
- Low rate of Roundup applied as soon as possible after 30% grain moisture
- Preserve grain quality
- Reduce grain moisture and drying costs
- Improve ease and efficiency of harvesting operations
 - Improved timeliness (lodged crops/uneven ripening/secondary tillers)
 - Higher throughput through combine
 - Fewer separation losses and cleaner sample
 - Important tool in wet seasons and in Scotland, Northern England
 - Residue testing shows farmers use pre harvest as required



*crop*protection
EME



Pre-harvest Use

- **Approved by CRD for wheat, durum wheat, barley, rye, oats, oilseed rape, linseed, peas, beans and mustards.**
- **Control of perennial weeds and harvest aid.**
- **Rates of use from 0.36-1.44 kg ai/ha**
- **Has been used for past 30+ years**
- **Applied from 30% grain moisture**
- **Harvest interval: 7 days**
 - It typically takes 10-14 days to work in wheat