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THE GROWING THREAT OF BROME

Background

As an arable weed, the bromes can be split into two key groups; the *Anisantha spp*, which includes sterile and great brome, and the *Bromus spp* which includes rye brome, meadow brome and soft brome. As a weed that thrives in no-till scenarios, it is becoming increasingly common as growers reduce the intensity of tillage.

Great brome

Rye brome

Meadow brome

Sterile brome (barren brome)

Soft brome

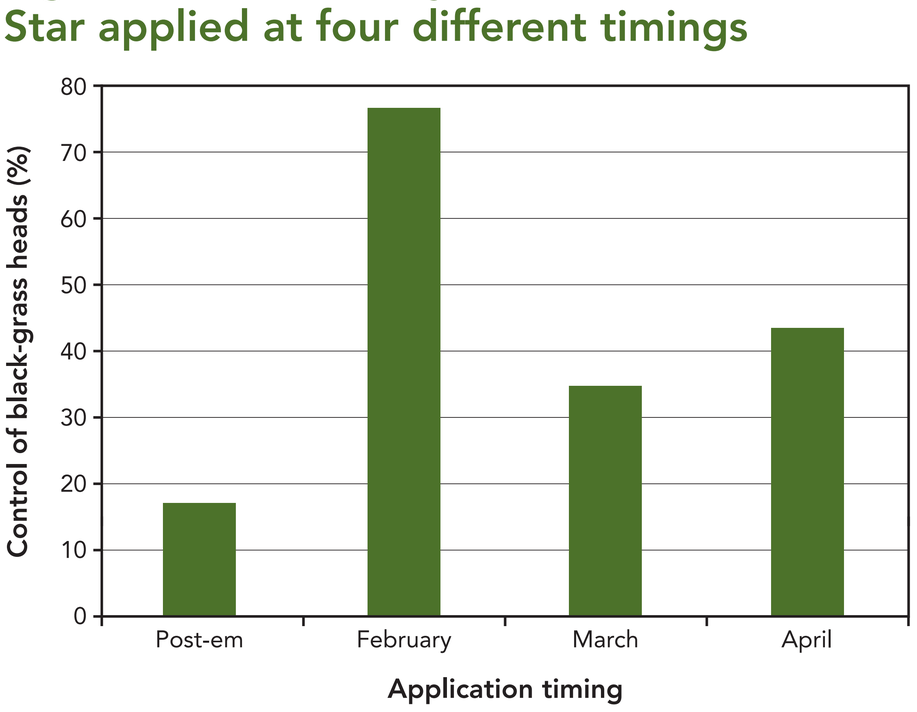
Timing is everything

In a species where there can be a significant cohort of spring emerging plants (35% of total plants in the trial), and the control options (ALS herbicides) require a balance between small plants but active growth, control can be difficult. This effect was clearly demonstrated in the 2018/19 field trial, where an application of Broadway Star in February gave the greatest control.

Recommendations for ALS herbicide applications:

- Mean 7-day air temperature – 8°C
- Soil temperature (at 10cm) – 6°C

Figure 1. Control of rye brome from Broadway Star applied at four different timings



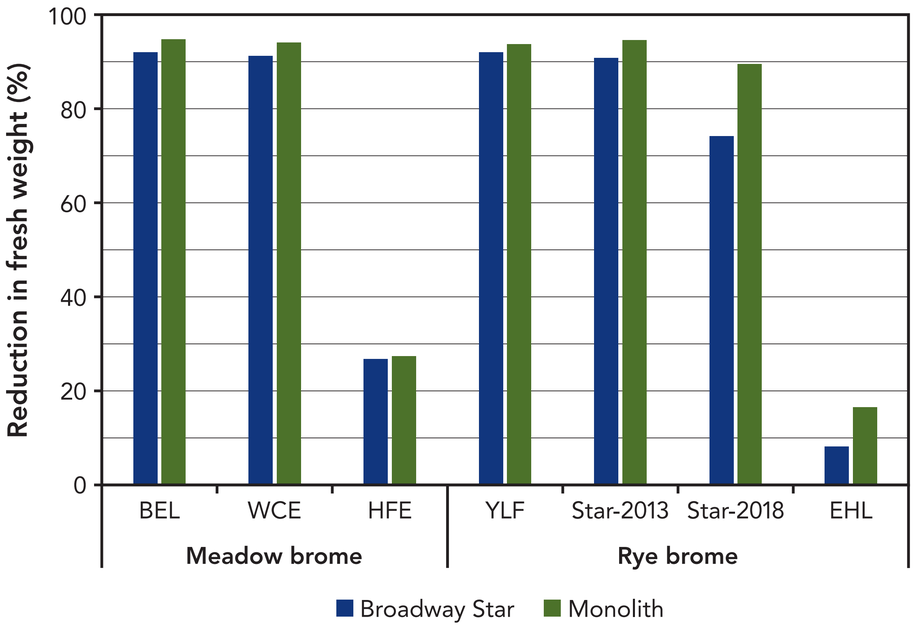
Note: Broadway Star (a.i. pyroxsulam + florasulam) @ 0.265 kg/ha

Sensitivity to ALS herbicides across populations

To complement the field trials, a series of meadow brome and rye brome populations were tested for effectiveness of two commonly used products – Monolith and Broadway Star (Figure 2).

In populations known to be sensitive, there was no difference in the level of observed control, however in populations where sensitivity to ALS herbicides was lower, then it was apparent that Monolith gave greater, and more robust, control.

Figure 2. The effect of two ALS herbicides on a range of brome species



Note: Products applied at ½ field rate with recommended adjuvant

This work was supported by BAYER