

Study Name: Sunflower desiccation with BAS 800 and Paraquat (0712)

Objectives: Compare BAS 800 and Paraquat for sunflower desiccation and determine the optimum timing for desiccation application.

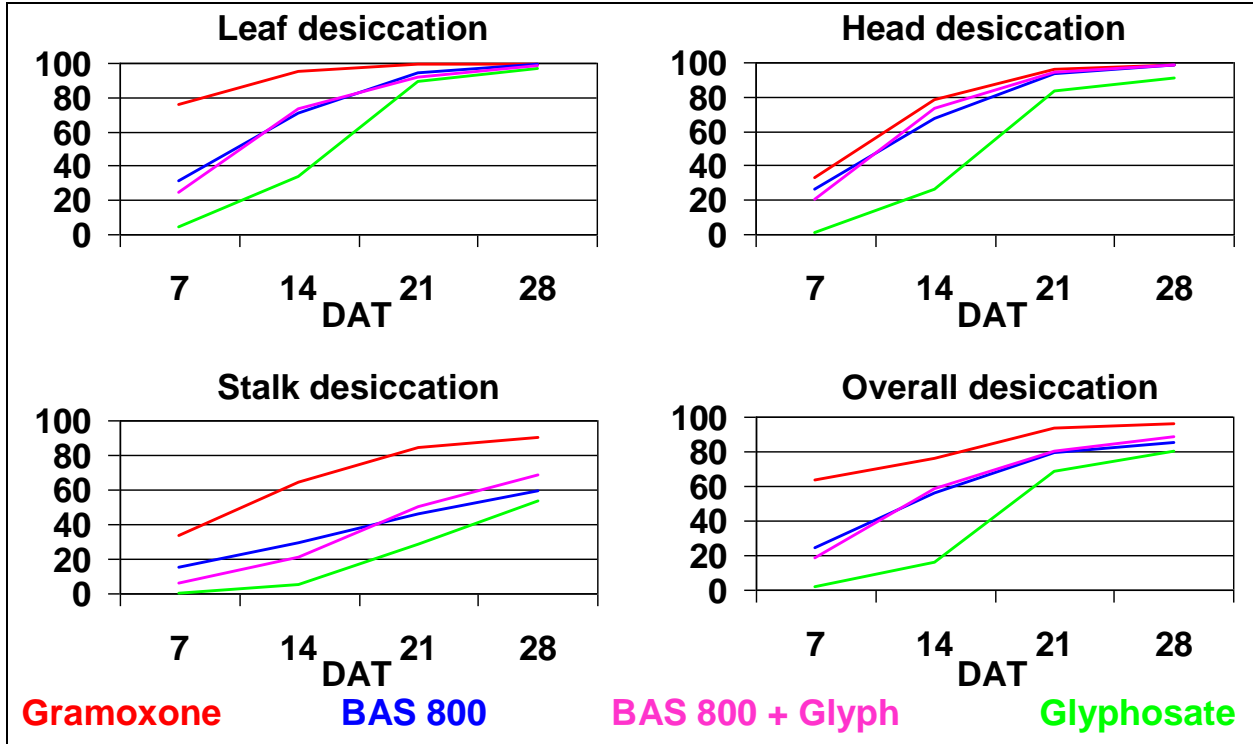
Results:

This study was initiated to find a possible replacement for paraquat as a sunflower desiccant. A desiccant is desired to reduce the impact of sunflower diseases, reduce bird depredation, and facilitate earlier sunflower harvest. BAS 800 is a new herbicide being developed by BASF for preplant or preemergence use in several crops. It could also be used in fallow or post-harvest. In this study, are testing BAS 800 for potential as a crop desiccant.

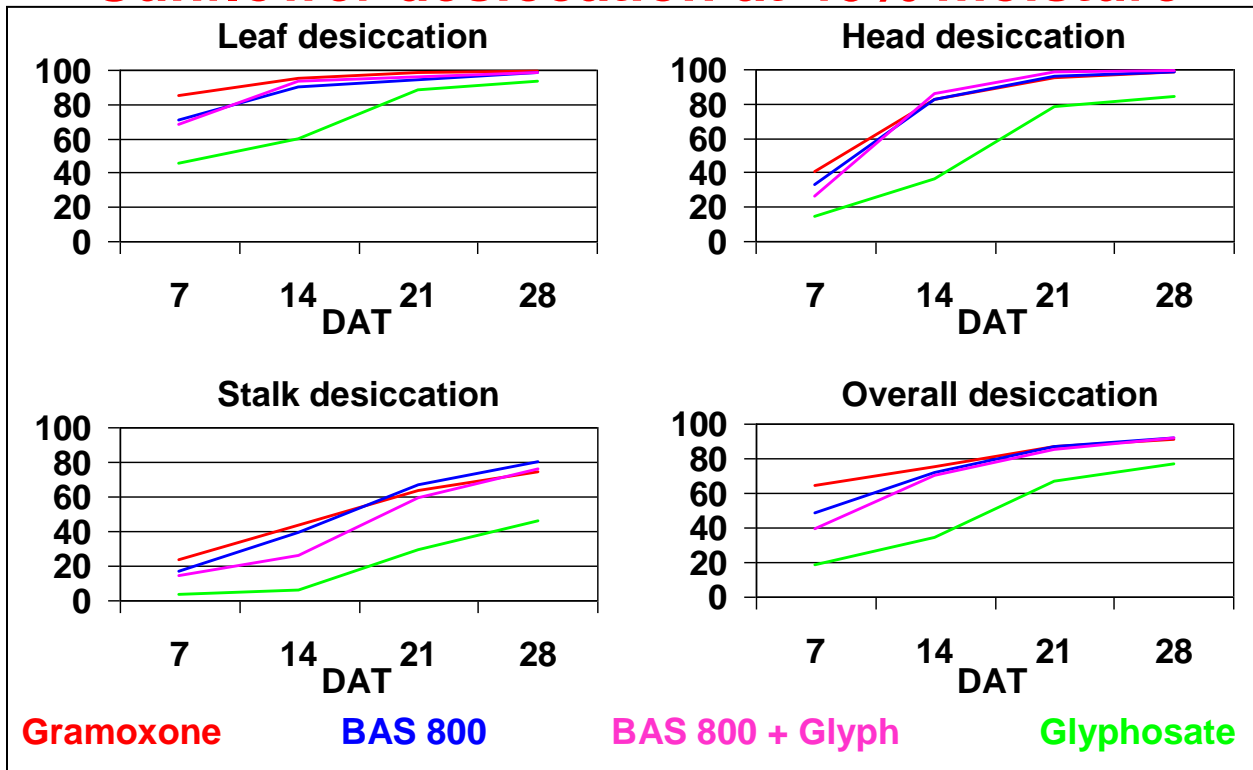
Treatments were applied at approximately 50%, 40%, and 30% seed moisture over the top of sunflower. Herbicides were applied to 8 rows (30-inch spacing) that were 30 ft long. Each treatment was replicated four times. The four herbicide treatments were 1) paraquat at 1.5 pt/A, 2) BAS 800 at 50 g/ha, 3) Glyphosate at 0.75 lb ae/A, and 4) BAS 800 at 25 g/ha + glyphosate at 0.75 lb ae/A.

At 50% moisture, paraquat (Gramoxone Inteon) demonstrated slightly faster leaf, head, stalk, and overall desiccation. However, at 40% and 30% moisture, desiccation with BAS 800 alone or with glyphosate was similar to paraquat. Desiccation with glyphosate alone was generally slower than other treatments.

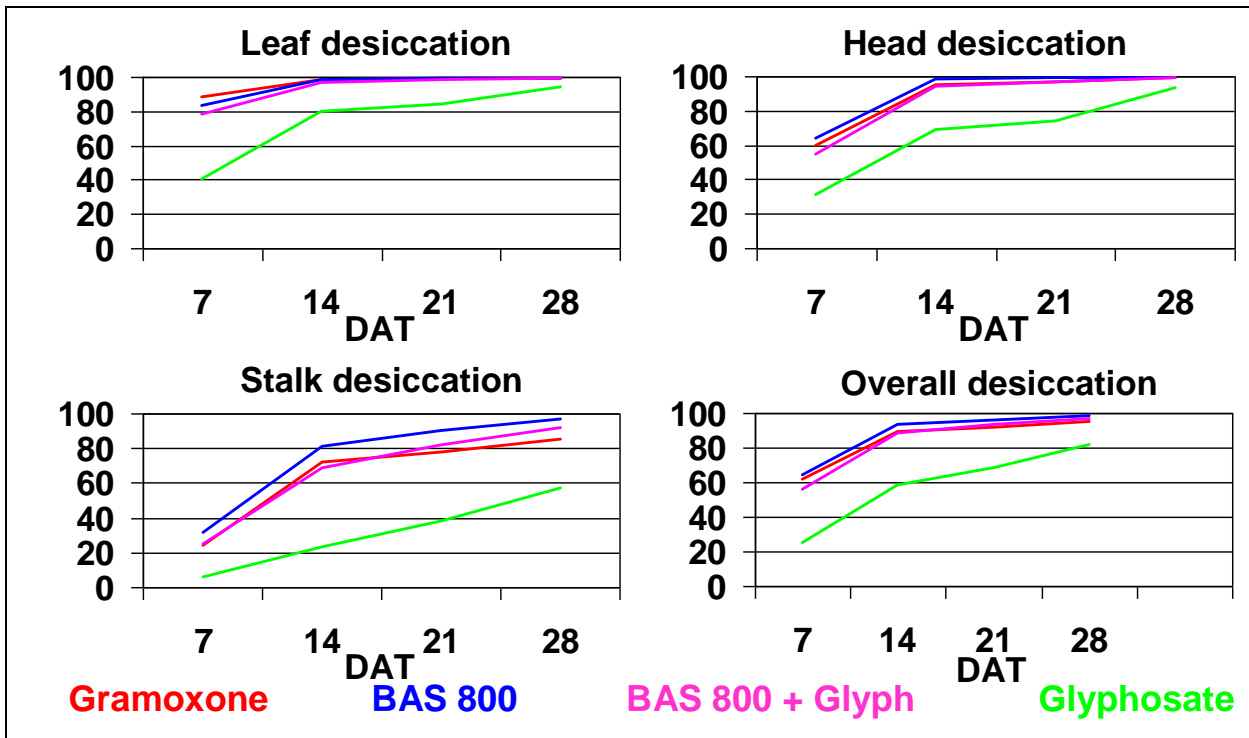
Sunflower desiccation at 50% moisture



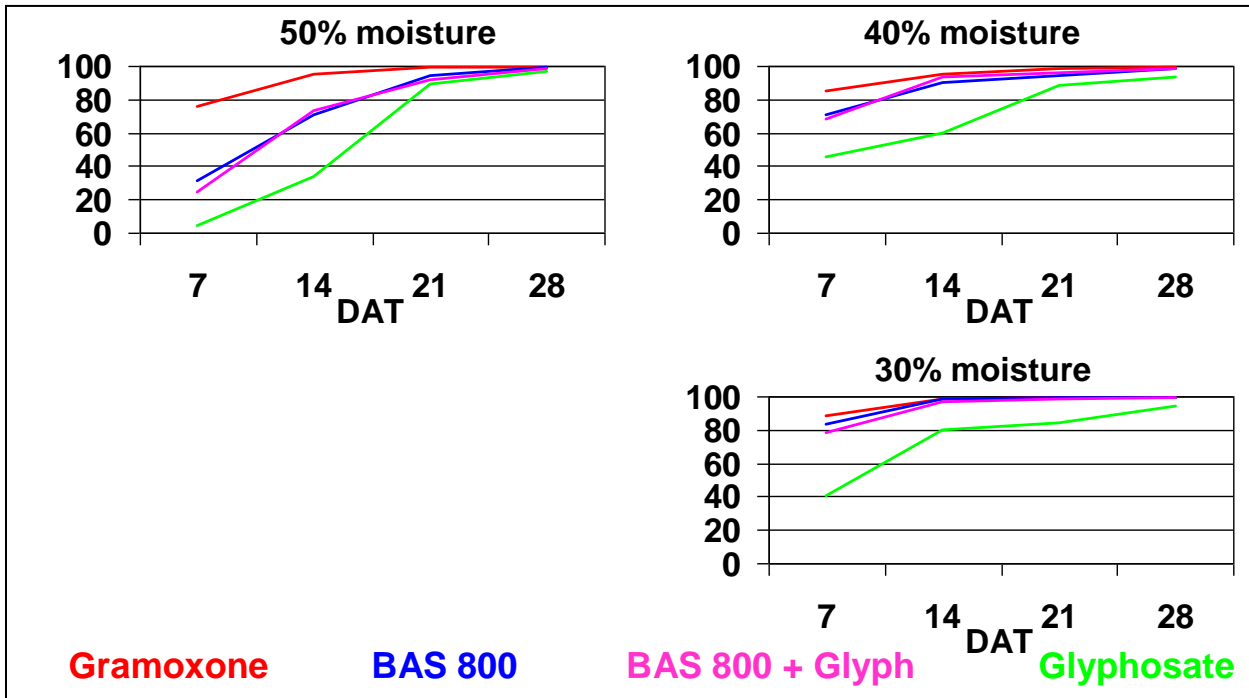
Sunflower desiccation at 40% moisture



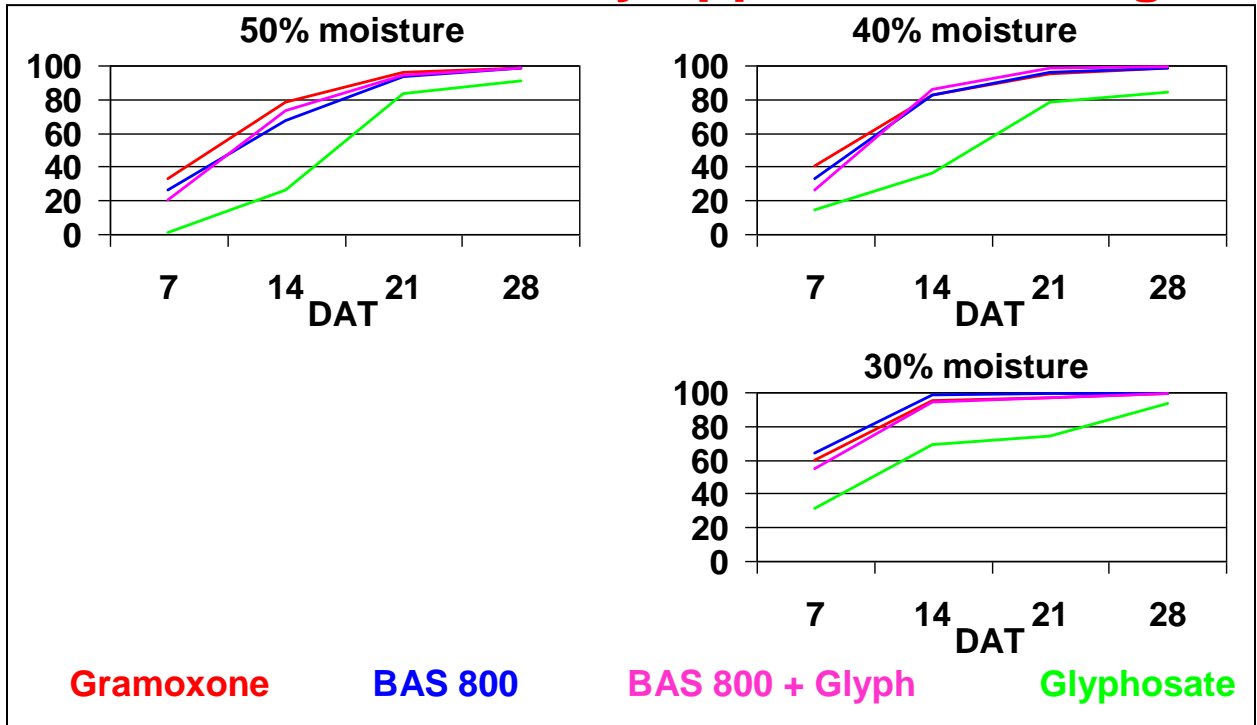
Sunflower desiccation at 30% moisture



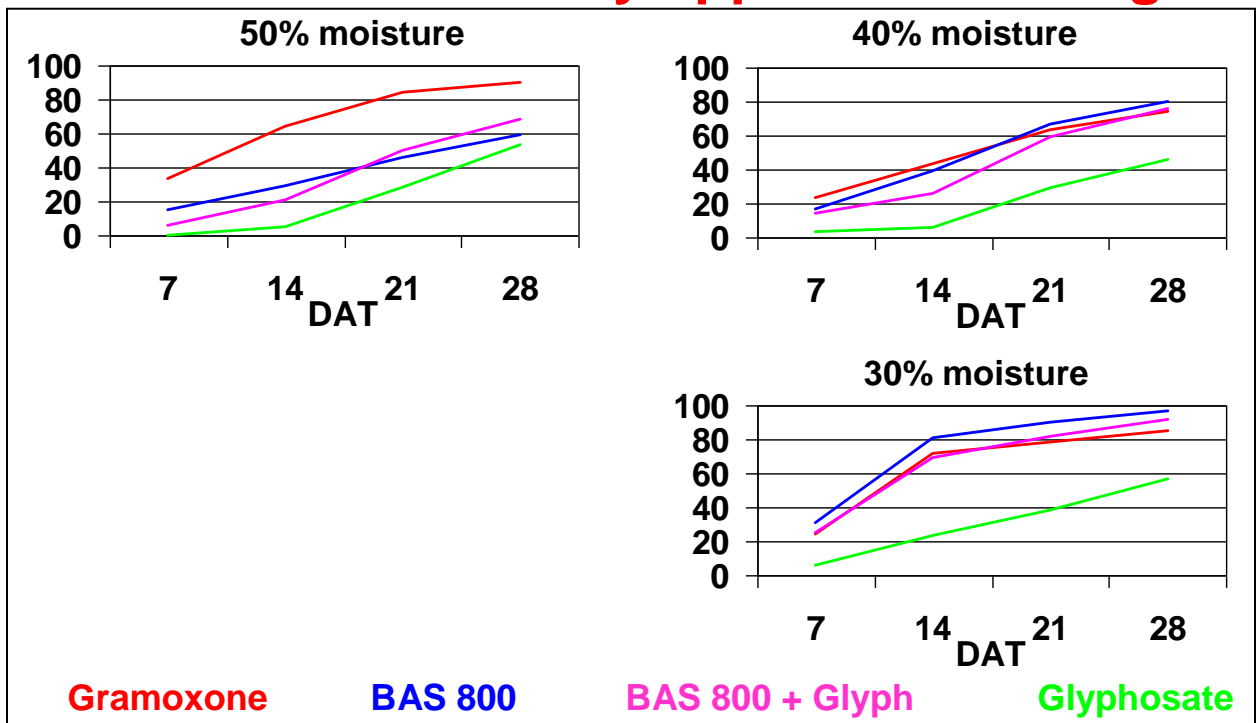
Leaf desiccation by application timing



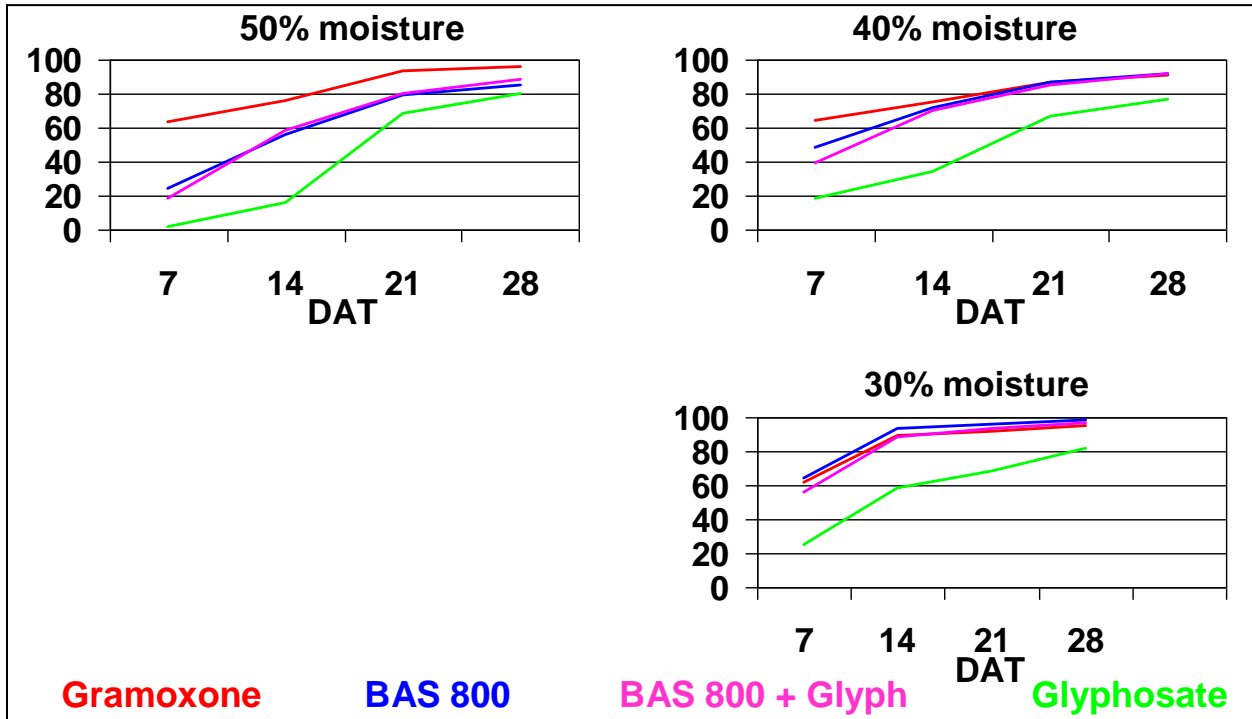
Head desiccation by application timing



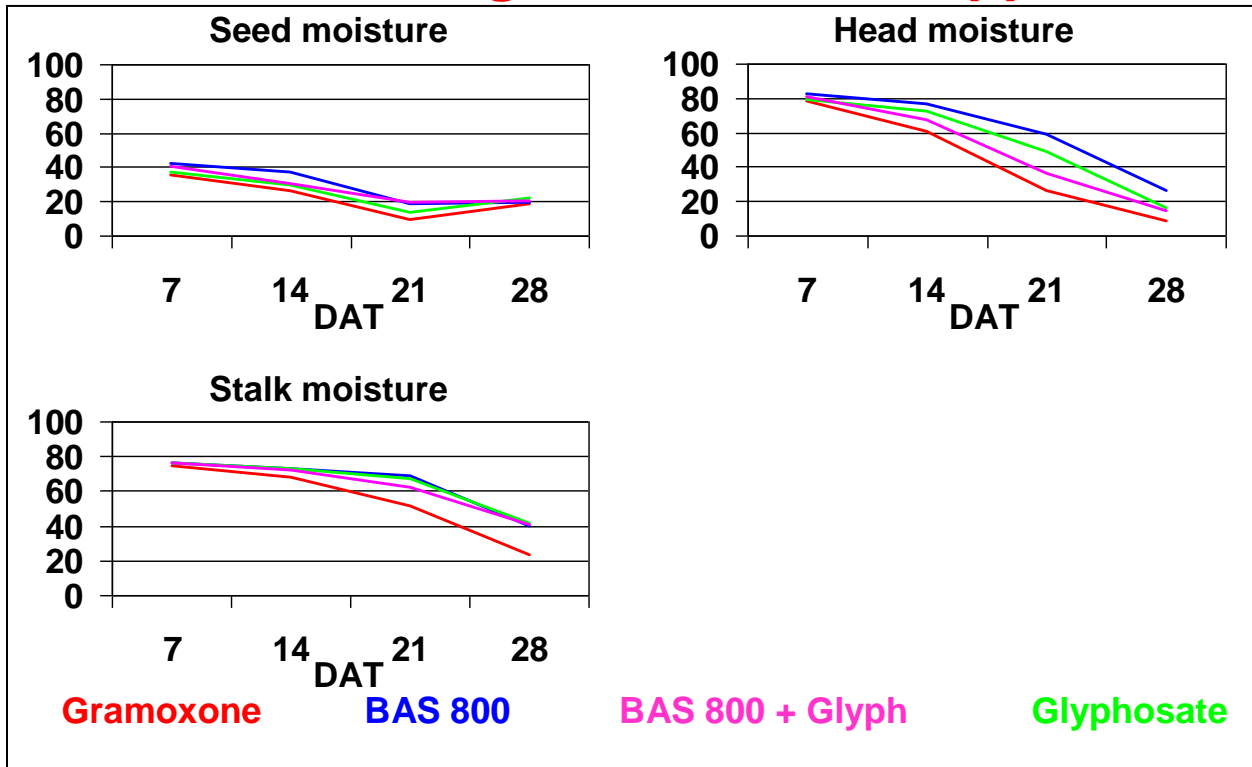
Stalk desiccation by application timing



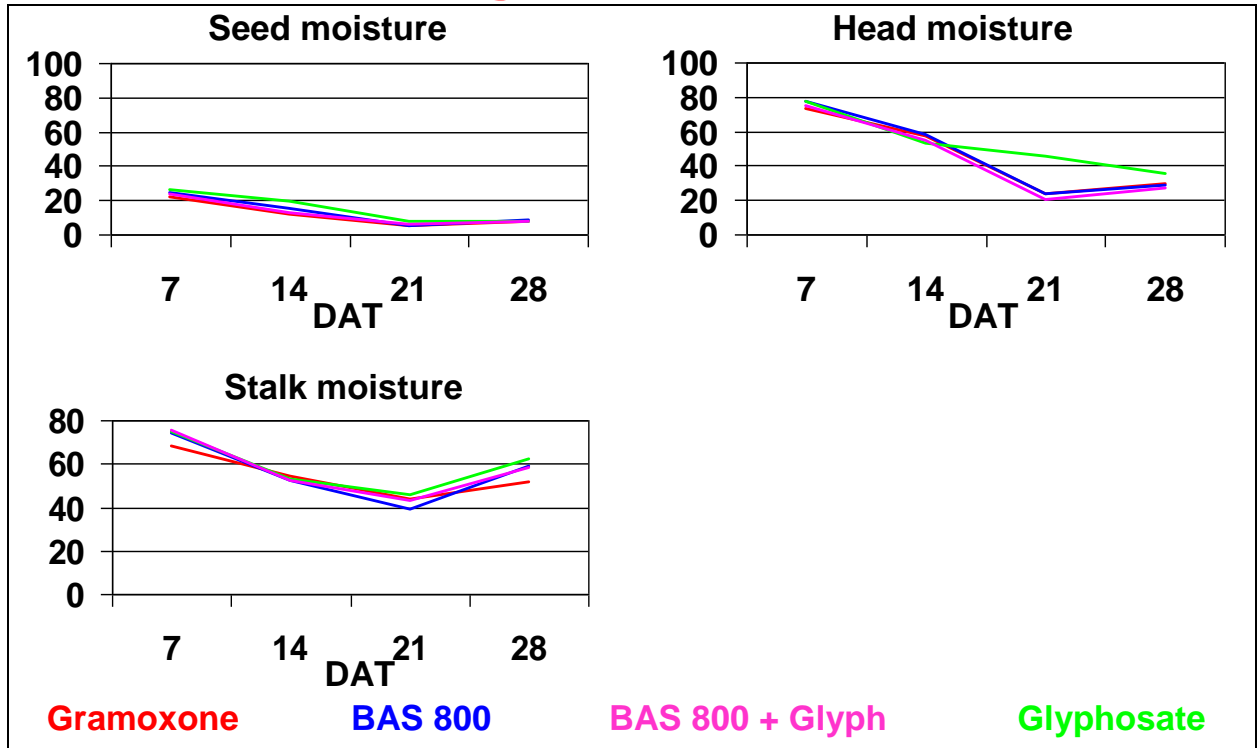
Overall desiccation by timing



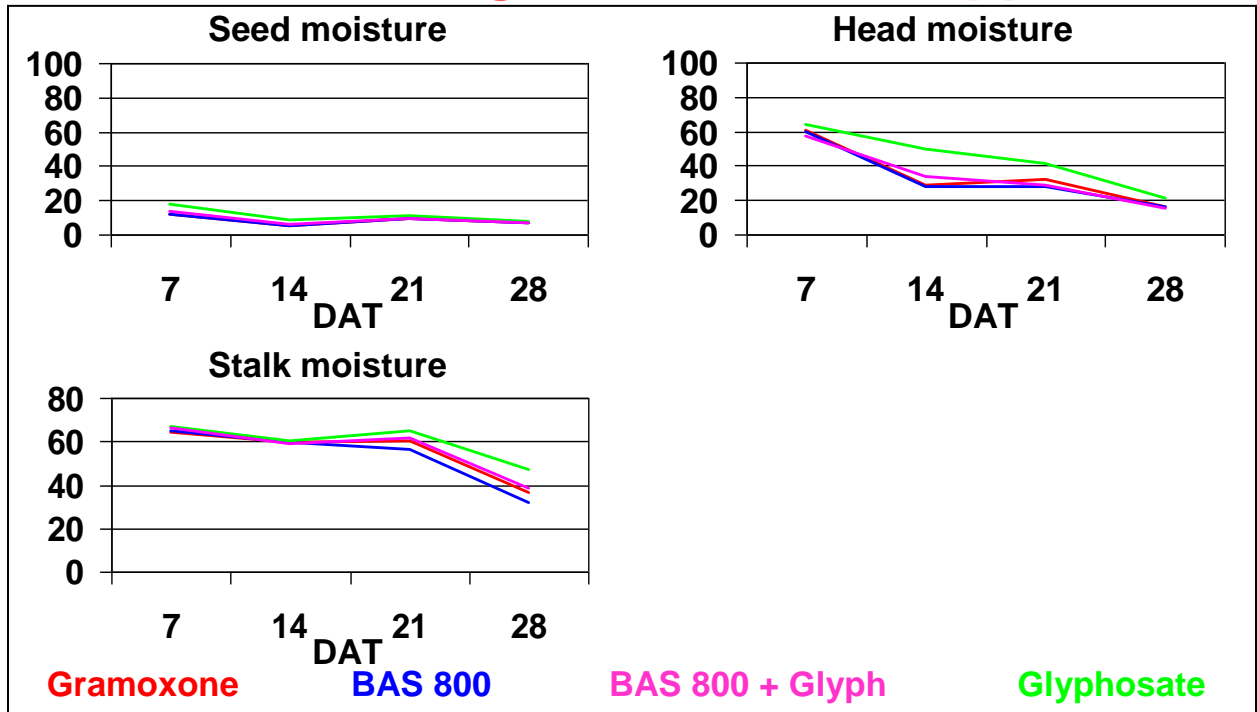
Moisture following 50% moisture application



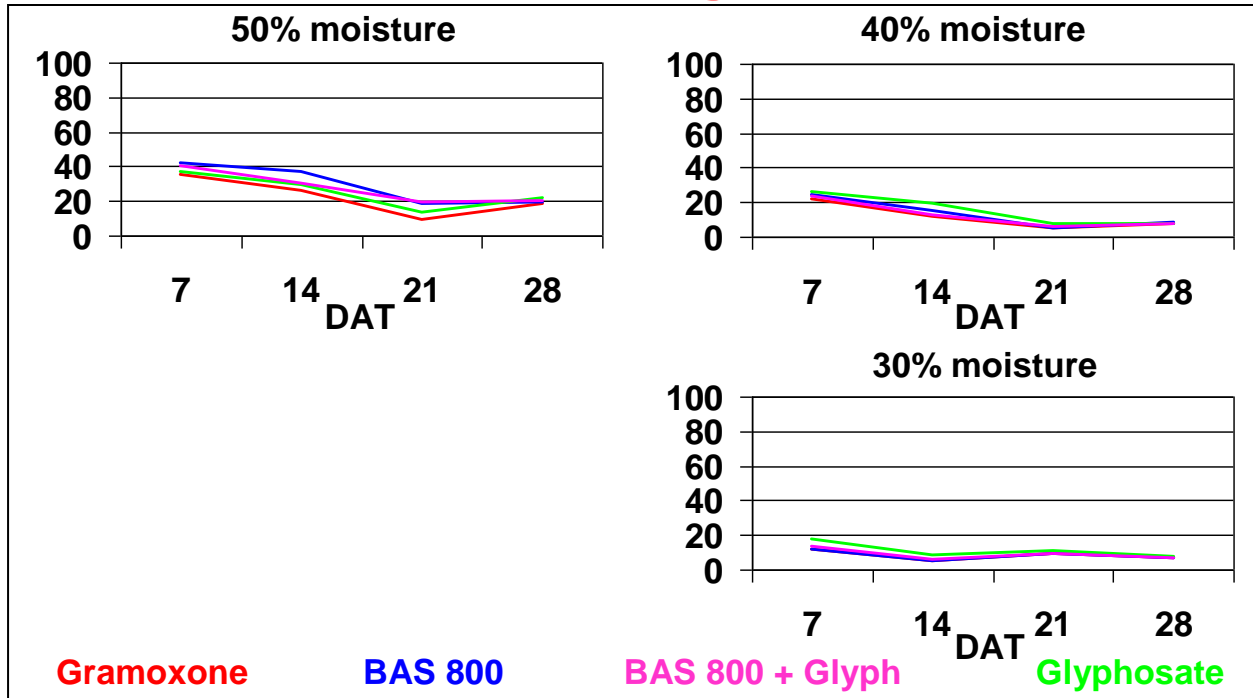
Moisture following 40% moisture application



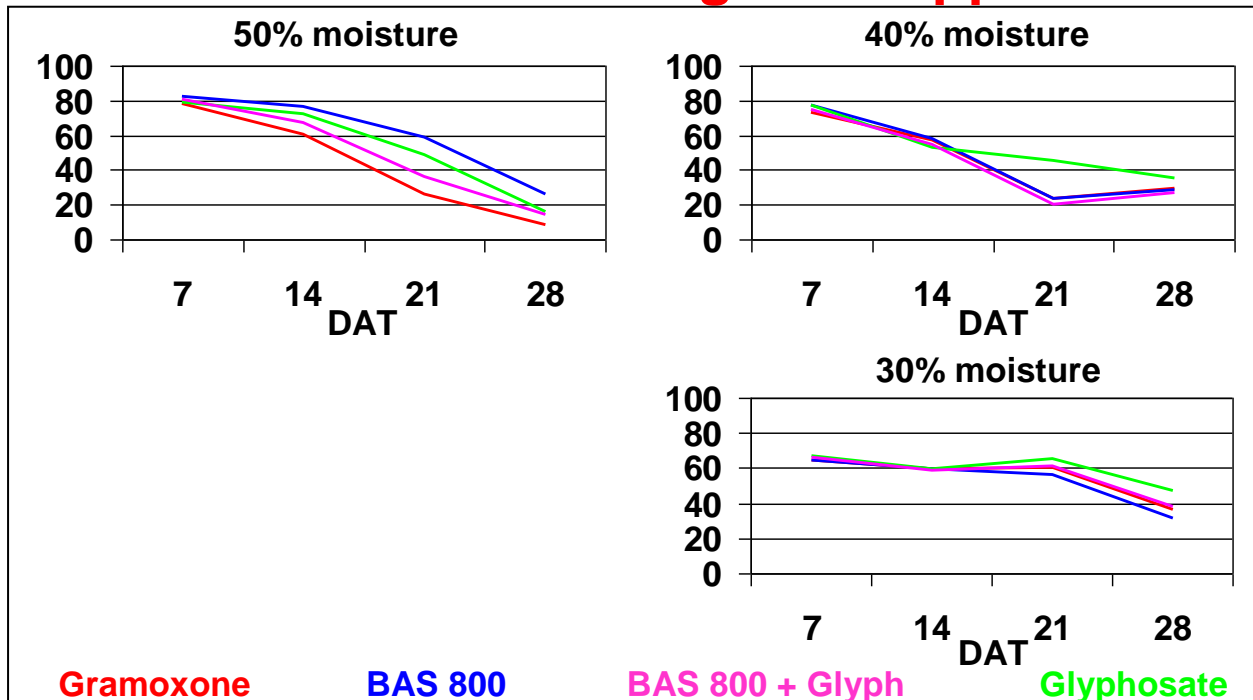
Moisture following 30% moisture application



Seed moisture following each application



Head moisture following each application



Stalk moisture following each application

