

Bleachers & Glyphosate

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PLNT 4013
Principles of Weed Science

Pigment Inhibitors

Pigment inhibitor - whitening symptoms
Pre plant incorporated and preemergence
Volatile - NO aerial applications-off target impacts

Clomazone / Command 3ME

Pigment inhibitor -- plants will be "white"
PPI & PRE
Volatile - NO aerial appli. - white house plants
Used in soybeans, peas, pumpkins, cotton (OP)
Excellent for velvetleaf control
Poor cocklebur, pigweed, and MG control

Clomazone / Command 3ME

MOA - Inhibit the production of carotenoids which are energy absorbing pigments



Clomazone / Command 3ME

Symptoms occur first on new growth.

Why?



Glyphosate

Mode of action - Amino Acid Synthesis Inhibitor
-aromatic amino acids
POST ONLY - SYSTEMIC
Readily translocates to kill roots of weeds
Rather slow to absorb - 10 to 14 days
NO soil activity, NO leaching, Rapidly degraded
NOT volatile
Can control larger more mature weeds
-greater leaf area and lots of CHO's moving down
Use UAN or ammonium sulfate

Glyphosate

Rope wick, other wipers, hooded sprayers
allow selective treatments

Besides crops, sod and roadsides
careful with turf (must be fully dormant)

EPA "Category E" rating – safest rating

Not very toxic to mammals and good
environmental qualities

Glyphosate Symptoms include
interveinal chlorosis beginning at the
meristem



Glufosinate / Liberty, Ignite

MOA -Inhibits glutamine synthesis and causes the
rapid production of ammonia

Liberty Link corn and soybeans & Burndown

Faster acting than Roundup or Touchdown

Uses – Postemergence, nonselective control of
annual and perennial grasses and many annual
broadleaves in Liberty Link Corn

Not very good for perennial broadleaf weeds

No soil activity, rapidly degraded

Does not translocate

