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Herbicide Mode of Action: Lipid Biosynthesis Inhibitors

When I think about Lipid Biosynthesis Inhibitor herbicides, Post (sethoxydim) and Select (clethodim) come to my mind. A great description of these type of herbicides can be found at the Section VI of the Arizona Pest Control Advisor (PCA) Study Guide. They say a good teacher can explain complicated things in a simple way. Please read this explanation by Barry Tickes:

“These herbicides are known as ACCase inhibitors because they inhibit the production of acetyl-coenzyme A carboxylase (ACCCase) which is an enzyme needed in the first steps of lipid or fatty acid production. Lipids are needed in the production of new membranes which, among other things, are needed in the production of cell walls. These chemicals move from the foliage to the growing points, only kill grasses, and have very little soil activity. Grasses stop growing immediately and slowly turn chlorotic or red and die usually in 7 to 21 days. These products are used to selectively kill grasses in broadleaf crops.

Classification	Common Name (s)	Commercial names	Arizona crop registrations
Aryloxyphenoxy Propionates	fluazifop fenoxaprop clodinafop diclofop	Fusilade Puma, Acclaim, Option, Whip Discover Hoelon	Small grains, Cotton, trees & vines, Several broadleaf crops
Cyclohexanediones	sethoxydim clethodim tralkoxydim	Poast, Segment, Vantage, others Select, Arrow, Prism, Envoy, Intensity, Volunteer, Trigger, Section, others Achieve	Alfalfa, cotton, Several broadleaf Crops Small grains

Please checkout the following video that shows the symptoms of Poast herbicide to wheat.