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NEW COTTON HERBICIDE ON THE WAY

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Cotton farmers will have a new herbicide choice in a couple of years. The herbicide is named Brawn and it's early development came via the Ciba Geigy folks (who are now part of Syngenta). The herbicide is a lot like Staple- it has the ALS mechanism of action and is a broadleaf type herbicide.

Brawn has been very good on cocklebur and morningglory and is probably a bit better than Staple on those weeds. A strong attribute of Brawn will be that it has excellent activity on nutsedge and sicklepod. Notable weaknesses of Brawn include prickly sida and velvetleaf- which are weeds that Staple controls well. As with Staple- grasses get sick, but don't really die. Also as with Staple, there can be tank-mix antagonism when you try to mix a grass herbicide with Brawn.

When comparing residual activity, Staple has the longer residual activity and the current plan is that Brawn will be positioned as a purely postemergence herbicide. We did try a preemergence treatment and found some fairly good activity- so there is some residual activity which can be useful. However, there appears to be very few crop rotational concerns.

Brawn has a little more activity on cotton than does Staple. You might say that Staple occasionally causes a "yellow flash" and Brawn often causes a yellow flash. In fact crop response increases as cotton gets older and two distinct use patterns are planned for Brawn: early over the top and then later-post directed.

A key problem with both Staple and Brawn is resistance to ALS herbicides which is fairly common in cocklebur and Palmer amaranth. In our test plots, we've been getting excellent morningglory control and then losing the cotton because Palmer amaranth takes over.

Because of weed resistance as well as the weakness on prickly sida there will be a wide range of Brawn-based programs. Since Syngenta has a long list of cotton herbicides, mixtures with Touchdown and programs with Caparol and Zorial are likely to be promoted. Again, post directed is a major anticipated use. One additional use we haven't investigated is a Brawn-Staple tank mix. With ALS-type chemistry you can sometimes get good results from mixtures as the strengths of one herbicide covers the weaknesses of the other. Ken Smith at University of Arkansas has reported good results with these types of treatments. Nutsedge, sicklepod and morningglory remain as troublesome cotton weeds and Brawn will be a valuable new tool to use for their control.