## NEW FIERCE HERBICIDE FOR COTTON

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## **Abstract**

Fierce is a new herbicide developed by Valent USA and has recently been labeled for use in field corn, soybean and cotton. Fierce is a premix of flumioxazin (sold as Valor Herbicide by Valent USA) and pyroxasulfon, a new herbicide developed by Kumiai Ihara of Japan. Studies were designed to evaluate Fierce Herbicide as a pre-plant and a lay-by herbicide in cotton. Studies were conducted by numerous universities across the cotton belt as well as in-house studies conducted at Valent's Mid South Ag Research Center in Leland, MS.

Pre-plant applications of Fierce Herbicide in years prior to 2013 indicated a high degree of crop safety. However, the extreme weather encountered during the spring of 2013 resulted in severe cotton injury. For this reason, pre-plant use instructions found in the 2014 cotton label for Fierce Herbicide specifies a 45 day pre-plant interval regardless of tillage system used. In the lay-by systems evaluated, Fierce was always applied as a tank mix with diruron for increased resistance management for Palmer amaranth. Cotton was not injured by any lay-by application. Palmer amaranth control was excellent out to 60+ days after application.

When Fierce Herbicide was compared to Valor in these systems, Fierce provided slightly greater control of Palmer amaranth and much greater control of annual grasses. As has been seen in other crops, Fierce Herbicide is also more consistent in weed control than Valor and is more active in drier weather. The Lay-by section of the 2014 Fierce cotton label specifies the application timing as 16 inch cotton, similar to the Valor cotton label.