

NEW FIERCE HERBICIDE IN COTTON

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Abstract

Fierce Herbicide is a new herbicide developed by Valent USA recently labeled in corn with a soybean label pending. Fierce is a premix of flumioxazin (sold as Valor Herbicide by Valent USA) and pyroxasulfon, a new herbicide developed by Kumiai Ihara of Japan. Valent USA was interested in expanding the Fierce label to include cotton. Therefore, studies were designed to evaluate the potential fit of 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 uses in Georgia and along the east coast included evaluation in the strip tillage system which has been developed for Palmer amaranth control. Fierce herbicide had an excellent fit in the strip tillage system in Georgia, but control of Palmer amaranth decreased when this system was utilized in North Carolina. In the mid south, Fierce was evaluated as a pre-plant application 21 days prior to planting. Fierce provided excellent Palmer amaranth and annual grass control in this system. Cotton was not injured in any of these pre-plant systems. Lay-by applications were evaluated as well. 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 Herbicide 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. These factors demonstrate that Fierce herbicide has a valid fit in cotton production and brings value compared to other herbicides currently used today. The Fierce cotton label has been submitted to EPA and is expected in late 2013.