

Defoliating Drought Stressed Cotton

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Drought-stressed cotton often has thick cuticles and leathery leaves that inhibit the uptake of many defoliant. The potential for re-growth is often high due to unused nitrogen remaining after premature cutout. The uptake of Freefall appears to be slightly inhibited in drought-stressed cotton and higher rates may be needed. Ginstar delivers a liquid form of thidiazuron and limited research suggests that their uptake may be less affected by drought-stressed cotton than wettable powder formulations of Freefall. Tank mixtures with Folex, as well as the addition of silicone surfactants or ammonium sulfate, have been shown to increase the uptake of Freefall on drought-stressed cotton. However, use cau-

tion when applying higher rates or adjuvants in warmer weather, as desiccation and stuck leaves may result.

Drought-stressed cotton has thicker cuticles that limit the penetration of some products. In high temperatures, combinations of herbicidal-type defoliant may desiccate leaves. Re-growth is often a problem if rainfall occurs following application. Re-growth can be a concern with applications of Folex alone or tank-mixed with ethephon, depending on moisture conditions and temperature following application. Activity of most defoliant is reduced under cooler conditions, and higher rates will be needed. Re-growth is generally not as big a concern as with warmer temperatures. Boll openers should be added to all treatments to ensure boll opening in the event of freezing temperatures. Δ

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