

**WEED MANAGEMENT IN NO-TILL  
AND CONVENTIONAL-TILLAGE ROUNDUP  
READY COTTON**

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**Abstract**

Research was conducted at two locations in North Carolina investigating the use of Roundup Ready cotton for no-till (Goldsboro) and conventional-tillage cotton production (Clayton and Goldsboro). The cover crop was terminated with 1.0 lb ai/ac of Roundup Ultra approximately 2 weeks before planting. The formulation of Roundup was used was Roundup Ultra and no additional surfactants or additives were used with these treatments. Staple was applied with a nonionic surfactant at 0.25% of the spray volume.

In the no-till study Roundup Ultra was applied at 0.75 lb ai/ac while in the conventional-tillage studies Roundup Ultra was applied at 0.5 lb/ac. The first application of Roundup Ultra was applied postemergence over-the-top to 4-L cotton. Later applications of Roundup Ultra were applied with a hooded sprayer directing the Roundup Ultra to the base of the cotton plant. In the no-till and conventional studies, Roundup Ultra alone applied three times on an as needed basis (ASN) controlled johnsongrass (Sorghum halepense), sicklepod (Senna obtusifolia), velvetleaf (Abutilon theophrasti), common ragweed (Ambrosia artemisiifolia), common lambsquarters (Chenopodium album), Ipomoea morningglories, goosegrass (Eleusine indica), broadleaf signalgrass (Brachiaria platyphylla), large crabgrass (Digitaria sanguinalis), and Texas panicum (Panicum texanum) at least 90% with the use of no other herbicides. Control and lint yields were similar for systems that used only Roundup Ultra ASN, or systems that used Roundup Ultra with Prowl or Treflan plus Cotoran, Treflan, or the aforementioned soil-applied herbicides alone or followed by Bladex plus Bueno 6. As long as Roundup Ultra was included somewhere in the system, weed control and cotton yields were similar. If Cotoran was used PRE or Bladex plus MSMA was used at LAYBY, only two applications of Roundup Ultra were needed.