

Cotton Seeding Rate Calculators

► Planting seed is the foundation of row crop production. The seed and variety selected determine genetic potential and greatly affect crop performance, including factors such as stand establishment, in-season growth and management, cotton yield, and fiber quality. Use the accompanying worksheets to help you calculate seeding requirements.

Since the introduction of transgenic traits and technologies in the mid-1990s, cotton variety selection has also become integral to insect- and weed-management options. In 2006, premium seed treatments were introduced as a convenient way to suppress nematodes, seedling diseases, and thrips. These treatments and the ongoing development of host-plant resistance in nematode- and disease-resistant cultivars further elevate both the cost of seed and the importance of selecting the best variety.

Because planting seed is such a critical input, growers need to accurately determine how much seed to purchase. Seeding rate calculators help growers determine this quantity as well as in-field planting rates and targeted plant populations. Two interactive worksheet seeding rate calculators—**Standard, Non-Hill Drop Planting** and **Hill Drop Planting**—are provided to help you calculate seeding requirements.

Cotton is typically planted singly (see Standard, Non-Hill Drop Planting worksheet), which involves delivering one seed at a time in the seed furrow, or in hill-drop fashion (see Hill Drop Planting worksheet), which can usually be done at a fairly accurate, consistent distance between each seed. Using precision air planters, 2 to 3 seeds are dropped together in a hill, usually within an inch or so of each other. The hill-drop technique gives emerging seedlings more power to break through crusts and barriers at the soil surface and is especially helpful for varieties that have marginal vigor or for situations in which cotton is planted in harsh conditions.



Seeding rate charts and calculators for each technique are provided. The required number for the single seed (Standard, Non-Hill Drop Chart) is the desired distance between each seed. The Hill Drop Planting chart assumes a rate of 2 seeds per hill and requires the distance between hills as well as the row spacing.

Note: Numbers for 3 seeds per hill are not shown. When 3 seeds are planted and 3 seedlings emerge, 1 is usually less healthy. To determine numbers for dropping 3 seeds, enter the hill-drop spacing and row spacing, then multiply seeds per foot and seeds per acre by 1.5 and the bags per acre by 0.67.



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