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dba "Elstel Farm & Seeds" "The Crabgrass Seed Folks"

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FACT SHEET 1994-97: 'Quick-N-Big®' Crabgrass and 'Red River' Crabgrass Planting and Establishment Procedures.

<u>**Crabgrass</u>** is the common name for a large group of warm season, reseeding, high quality, annual grasses. They occur naturally, as several species of Digitaria with innumerable ecotypes (variations), throughout the United States. Oklahoma has 6 different species.</u>

<u>'Quick-N-Big®' and 'Red River' Crabgrass Variety</u> are researched and properly released varieties of crabgrass of the scientific names **Digitaria aegyptica and D. ciliaris**. These are the only known developed varieties of crabgrass in the world. Red River crabgrass was the first such release in 1988. Quick-N-Big® Crabgrass was first available in 2006. These varieties are discussed in more detail in other Elstel Farm and Seeds Fact Sheets.

These crabgrass's can produce 5 to 6 tons per acre of dry weight forage under **upper level management**. Yields of 1.5 to 3 tons per acre are more usual. These grass's have excellent palatability, good protein content relative to nitrogen inputs, and relatively high digestibility. They are essentially a non-toxic forage.

The major reasons to plant Quick-N-Big® and Red River crabgrass are for high summer forage quality, easy double cropping, summer forage mixtures, soil conservation, turf, and environmental management. They are excellent grazing and make top quality, leafy, fine stem hay.

A major use of both varieties is *as a* planned volunteer warm season grass in a double cropping program with wheat, rye, triticale, ryegrass, oats, bromegrass, other cool season annual grasses, and cool season legumes. The production system is very variable depending on the location and goals of the producer. Both varieties can also serve as a mixture in bermudagrass, sudangrass, alfalfa, lespedeza, perennial grass plantings and numerous other forages.

Quick-N-Big® and Red River crabgrass are also used as a single crop forage and in that mode they have a green season similar to Bermudagrass, **if well managed**. Single crop crabgrass will usually be ready to graze 4 to 6 weeks before double cropped crabgrass and fall grazing (stockpile) can be allocated into midwinter or later. Single crop yields more than double crop by about double on average.

The major adaptation zones of Quick-N-Big® and Red River crabgrass are the 23 to 25 states of the most southeast third of the U. S. and other more northern areas and western areas under irrigation. This is basically from Nebraska and points to the south and east coasts. These grasses grow best on soils with the word "sandy" in the texture description. They also grow well on the loam and silt loam soils. These varieties grow best on soils of good surface drainage. They do not grow well on wetlands, saline or alkaline soils, or tight clay soils.

Planting Quick-N-Big® and Red River Crabgrass: Planting can be very variable, but still successful. Seeding rates can range from 1 to 5 lbs. of pure live seed (pls) per acre depending on the goals. Usual pasture and hay meadow rates are 3 lbs pls/acre. Rates of up to 5 lbs. pls/acre should be used where superb stands are the goal, and quick development and early production is desired. This is during times as needed for hay, dairy pasture, horse runs, top quality stocker cattle pasture, and quick conservation cover . One to 2 lb. PLS/acre and other low seeding rates, will be thin and develop slow with more weedy problems. Seed must be placed in a depth range of on the soil surface up to no more than ½ inch deep. Research shows about 50% of crabgrass seedlings emerge from ½ inch soil depth and less in perfect conditions, rather than deeper soil depths. A variable placement is preferred to reduce risk of unsatisfactory stands.

Never plant when the seed will be over ½ inch deep after the last field operation and after the next pounding rain.

Seed of both of these varieties is usually best planted on a very good fine, firm, freshly finished seedbed during early spring to mid summer. This is April to June in Oklahoma, but later plantings to early August have succeeded. For planting at a germination time, plant when the deciduous trees make a leaf and thereafter. Monitor the soil temperature. Plant after bare soil temperature in the upper 1 to 2 inches is consistently over 65°F to 70°F at midday. These guidelines are for plantings near early germination times and later.

These varieties are also successfully broadcast seeded or no-till drill planted into wheat and other cool season annual grasses and legumes during February to May, or properly planted after grain or hay harvest in the dry stubble. Tread the seed in with grazing livestock, but **do not** mud it in, or tread it **out** after it comes up. This method works well to establish new stands, but expect early growth to be slower and more spotty than on a good seedbed. These overseedings are generally best in grazeout, next best in cool season grass taken for grain, and least best in cases where cool season annual grasses are hayed. Guidelines as to soil temperature, etc., of the above paragraph are ignored early parts in these methods. The major reasons to use this planting procedure is to control erosion on erosion prone areas and to limit time and expense at planting time. Patience to get full cover and useful production is often necessary in this type of planting.

Quick-N-Big® crabgrass seed flows very well. Red River Crabgrass seed does not flow well by itself due to a rough textured husk around the seed and some "peach fuzz" on the husks. Planting is often done by mixing the seed with a dry fertilizer the land needs. Then plant the seed through a drill box with fluted seed feeds, or any fertilizer spreader **and be sure to check the spread on the seed to get swath overlap.** Most rotary(spinner) commercial spreaders only throw seed in about a 15 to 20 feet swath or **about** ½ **as far as the fertilizer**. Airflow fertilizer spreaders perform excellently to spread these mixtures. Some operators use dry sawdust, cracked grain, dry sand, etc., to provide bulk, weight and flowability. Grass seed planters with a good agitator in the hopper bottom can plant the pure seed of both varieties. However, it is easy to over-plant this way. Be sure the planter is properly set. It takes 5 to 6 crabgrass seeds to equal 1 ryegrass (not rye) seed, or 25 to equal 1 wheat seed in size. Quick-N-Big® crabgrass seed is slicker than Red River crabgrass seed, and it can be planted from a small seed planter easier than Red River crabgrass seed.

Production inputs and techniques must be adequate for good yield success. **"Off season" tillage makes these crabgrass varieties yield more than no tillage.** Research shows yields to be about double with a proper tillage. However, sometimes this tillage can nearly triple forge yields over no-tillage. Crabgrass in a single crop, or in a double crop, such as a cereal rye or early maturity wheat pasture, can be tilled in the fall, or the spring before seedling emergence. The crabgrass tillage should be done in the fall when late spring use of winter crops is usual, i.e., small grains for late grazing or grain, annual ryegrass, and winter legumes, etc. Tillage can be by disc, field cultivator, sweep plows, etc. Work the soil thoutoughly on the surface, but as shallow as feasible to get the job done (2 to 4 inches usual). Use phosphorous, potassium and lime similar to the needs of bermudagrass or winter pasture. 50 to over 100 lbs. of actual nitrogen per acre plus phosphorus and potassium needs are usual. Spray for weeds with 2, 4-D or other proper post emergence herbicides. Some fertilization can be pre-emergence and with split applications. Research and experience shows **proper pre-emergence (before crabgrass comes up) nitrogen (with or without phosphorus and potassium) will produce earlier grazing and more total forage without any detrimental effects or stand damage risk. Make this type of application at planting time or before volunteer stands emergence. Do each of these things properly to avoid damage to the grass.**

<u>Reminders and Cautions:</u> Most manmade stand failures, though few, are due to:**Too loose** and open a seedbed at planting, **No Packing** (rolling) before and/or after planting, **Too deep** seed covering, **Too early** planting which allows other grasses and weeds to get ahead, and Livestock stomping out young stands. Never tread on crabgrass as it emerges.

When these crabgrasses are managed for volunteer, **light proper tillage in the "off season" is needed** for best results: Till after rye (and other winter pastures if possible) and **before crabgrass emergence**. If spring tillage is not feasible, do the tillage before rye, etc., planting in the fall.

Post emergence fertilizing and spraying must be done after Quick-N-Big® and Red River crabgrass is tillering (stooling) or is up to 2 to 4 inches tall. Too soon can cause stand damage. **Never use liquid nitrogen** on young crabgrass, **Never top dress or spray weeds at too young** a stage, especially on wet soil, and **never put broiler litter on just before planting or volunteer emergence** or when crabgrass plants are too small. Refer to **Production** above.

Also visit our web site <u>www.redrivercrabgrass.com</u>, and the Noble Foundation Web site : <u>www.noble.org</u> On the Noble site, click on : "Agriculture Programs", "Publications", "Agriculture Publications", search for titles with the word "crabgrass" and click on for more information about crabgrass forage.