

R. L. & Pat Dalrymple DALRYMPLE FARMS

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

Warehouse: 24160 East 950 Road
Weatherford, OK 73096
No Phone

Farm/Office: 24275 East 910 Road
Thomas, OK 73669
Phone/Fax: 580-661-3997

E-Mail:rlandpat@cablone.net•Web:redrivercrabgrass.com•R.L.'s Cell Ph:[580-670-0043](tel:580-670-0043)(Best No.)

Fact Sheet 2004 : Using 'Quick-N-Big®' Crabgrass and 'Red River' Crabgrass Stubble As A No-Tillage Or Minimum Tillage Planting Base For Winter Annual Small Grains And Other Winter Annual Crops

"No-Tillage" is planting a given crop without any tillage immediately before or during the planting. Minimum tillage is a form of very restricted tillage immediately before or during the planting. These are somewhat common acceptable practices for numerous crops throughout the Eastern half of the U. S. The crops are many and the bases are primarily various perennial grasses, or a specific crop's residue (stubble) from the last season, or the residue of a different crop. This is a good farming technique from about the longitude of Western, Oklahoma to the east coast and anywhere within that area that has about 25 inches or more annual precipitation and soils where annual small grains or other annual winter crops can be grown. The technique is used throughout the Plains and much of the USA. There has been little attention given to using Quick-N-Big® Crabgrass (QNBCG) and Red River Crabgrass (RRCG) stubble as the base to plant in. We have done that many times for many years for both winter pasture only or for grain and seed production. **We find QNBCG and RRCG Crabgrass to be one of the very best of all bases we have used.** We have used at least 10 different bases in our experiences. This base also well fits **extreme minimum till** plantings where only one or two shallow tillage's are used immediately before or during planting.

In our case, we use common grain drills to do the planting and they work fine, partly because the stubble there is mostly sticking straight up and not laying horizontal on the soil, thus forcing it to be cut through for the winter planting. With the stubble sticking up vertical, the row openers cut right through and allow the seed to be well placed into the soil. Good moisture in the top soil zone is very helpful, too.

Examples. When R. L. was employed at Noble Foundation, this technique was used part of the time to produce cereal rye pasture after summer crabgrass pasture. Every planting was successful, with an average equivalent production of 289 stocker cattle winter grazing days per acre, and a range of 172 to 462 grazing days per acre. At 289 grazing days per acre and 2 pounds average daily gain, this could represent 578 pounds of beef gain per acre.

To date, on our farm , Jaggar wheat production with this technique has averaged 38 bushels per acre overall with 2 of the most proper plantings yielding over **50 bushels of wheat with only one tractor trip to plant (no tillage) in two different years.** Roundup herbicide was applied just prior to planting to control late summer vegetation , and green crabgrass stubble. That could be one more tractor trip. We have also very successfully used this technique to no-till plant annual brome grass's for seed production , and other winter annual crops for grazing or grain. **It is obvious that this procedure could be used to establish fescue, orchardgrass, perennial wheatgrasses, and smooth brome grass. And, we have also used this basic technique to no-till plant QNBCG for seed production in the prior seasons thin crabgrass stubble , or sudangrass stubble, or last years wheat stubble.**

Advantages. Advantages of this style of planting compared to multiple seedbed tillage plantings are: 1) **Very easy and rapid** means of planting, 2) **Can use common grain drill** equipment and **low power tractors**, 3) Leaves an excellent soil surface covering for wind and water **erosion control**, 4) QNBCG and RRCG in a good stand is a good "herbicide" and **few weed problems** exist at fall planting time. 5) **Less soil moisture evaporation** due to lack of tillage and the residue cover on the soil surface. 6) The crabgrass stubble is **much less suppressive** to the following crop compared to most stubble bases, 7) Takes **much less total time** to "prepare" the area and plant (as little as 10 total minutes per acre of crop planted in our case), and 8) **Requires much less of everything associated with a tractor and everything it pulls**, from the purchase, to maintenance, to fuel used, to time riding the tractor. Think about it!!!

Summary of the Planting Technique: This is a variable technique. A good farmer and grass grower can visualize these variances, adjust to their case, and still do a superb job. But, some things are **absolute**, or the system will not perform at near it's top capability.

A summary of these things is: 1) Manage and utilize the crabgrass to about a three inch **erect stubble** by about September 1 (at Oklahoma City latitude) or as soon as possible thereafter, 2) If very early and bare stubble , let it re-grow to about a 2 to 4 inch spindly leaf to absorb herbicide, then spray with about 1 ½ pints to 1 quart of Roundup (Glyphosate) herbicide per acre plus additives. 3) Drill soon thereafter. Drilling is very **easy in fresh dead crabgrass residue** about 7 to 15 days post-spraying. But. we have drilled , then sprayed, and we have sprayed and drilled the same day. If the last utilization is later, or the stubble is dead, drill without the herbicide. 4) Plant with any grain drill or no-till drill at about one inch deep. **Do not pack the drill row hard as the firmer soil may retard planted crop emergence.** Plant 80 to 100 pounds of live seed per acre of cereal rye, wheat, oats, barley, or triticale. Annual ryegrass will make much less early pasture, but the total is good. 5) **Absolute:** For early winter pasture **band a starter fertilizer** in the row with the seed. Use a nitrogen-phosphorus grade such as 18-46-0 at 50 to 100 pounds per acre. **You do not need a drill with a special fertilizer box.** The fertilizer is easily mixed with the seed and both planted down the row together from the seed box. **Always** wash the drill box vigorously , use a vinegar solution to help neutralize the fertilizer residue left in the drill box , and oil coat the drill box thoroughly

when done. 6) **Absolute:** Apply actual nitrogen at 75 to 100 pounds per acre at planting or at emergence for earliest winter pasture. For grain only make the application anytime, but for sure by mid January to mid February. If the fall to midwinter pasture was good, consider re-topdressing at the same time as above for spring forage and grain production.

Renovation for Crabgrass: For crabgrass to volunteer and perform well , there must have been a **good seed drop** and the **soil must be at least lightly tilled at least once per year**. An alternative to strict no-till planting in the fall, is to **extreme minimum till and plant**. This benefits the crabgrass the next season. This can be done with one tandem trip with a tillage tool, roller, and drill (thus one tractor trip per crop). If the fall planting is **strictly no-till**, and at the winter crop end there is a poor crabgrass stand, then the area **should be lightly tilled** to encourage volunteer or planted crabgrass and good production. Using a tillage tool lightly (two to three inches deep) followed in tandem with a roller works well. The overall idea is to do a **good job with minimum equipment input** for both crops. Some variance of total year after year no-tillage is needed to make both crops perform well. These combinations can be planned on given farms. **Cereal rye (grain rye) and the crabgrass varieties is among the best of these double crops, because the rye grows best in the fall and early winter, and it terminates growth early in spring to allow for renovation/tillage for volunteer crabgrass.**

In our cases on Dalrymple Farm, wheat planted this way has ranged from 25 bushels per acre to over 50 bushels per acre depending on the production year. But, consider that we had only 1 to 2 tractor trips to get it planted. We always have had good stands. And , the technique has also worked well for grain rye, and annual bromegrasses, i.e. , Matua, Stocker , and Persister varieties. There is no reason but that the technique can work for oats , barley, and triticales also. In this system, most of the grazing is in the spring season from February to end of grazing about May 15 in western Oklahoma. There is some, but usually little good fall grazing. And, this would be a good system for winter annual crops haying in the spring season.

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