

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@cableone.net • Web: redrivercrabgrass.com • R.L.'s Cell Ph.: 580-670-0043 (Best No.)

Fact Sheet 2001 : 'Quick-N-Big®' Crabgrass and 'Red River' Crabgrass and Legume Mixtures

Introduction: 'Quick-N-Big®' (QNBCG) and 'Red River' crabgrass (RRCG) varieties are high quality, very palatable, warm season grasses. Crabgrass is a re-seeding annual under the proper cultural and grazing practices. It is used as a pure stand, in numerous winter-summer double cropping syndromes and in mixtures. Mixtures may be grass mixtures of either annual or perennial grasses with or without legumes. In this case the focus on the legumes.

Reasons for a Crabgrass & Legume Mixture: The usual reasons for using legumes in grass mixtures are to add length of green growing season, add forage quality at times when crabgrass is not there or at the end of the crabgrass season when quality may decline, and to provide some soil nitrogen source from the legume.

The cool season legumes in double crop or mixtures with these crabgrass's can add upwards to 6 to 10 weeks of early spring grazing. The warm season legumes do not add much or any green season, but act primarily as a summer mixture as does the early summer season of cool season legumes. Warm season legumes such as alfalfa will grow later in the fall than crabgrass. Late season crabgrass and alfalfa growth can be stockpiled and grazed in early to mid-winter.

Most leafy legumes are premium quality and may add some quality over crabgrass. But, remember leafy crabgrass is 75% , more or less , digestible and often equal or more palatable than legumes. They make very good companions.

A very good stand of legumes can provide 50 to over 100 pounds of actual nitrogen per acre. Roughly 80%, more or less, of the nitrogen is in the above ground growth. **To get best benefit from that growth, the grazing must be done rotationally and by keeping the livestock on the paddocks to recycle the nitrogen in the manure and urine. That is where most of the nitrogen comes from.** Hay effectively removes most of the nitrogen from the field and reduces nitrogen supply to the grass remaining. However, the hay can be superb at near 20% crude protein. **Information by Chamblee and Mueller of North Carolina State University, averaged over all areas, showed a bermudagrass-native crabgrass mix fertilized at 120 pounds per acre nitrogen to**

yield 5457 pounds per acre. When cool season annual legumes were added, without nitrogen, the yield was 5329 pounds per acre for the mix and when the bermudagrass, crabgrass and legumes mixture was fertilized with 120 pounds per acre nitrogen the yield was 8354 pounds per acre. Usually a complimentary grass or legume in a forage mixture adds production. Well managed high quality forage can convert to beef at about 10 pounds of grass to one pound of beef gain. So, potentially these three treatments could produce about 530 to 835 pounds of stocker steer cattle gain per acre.

Planting Crabgrass & Legume Mixtures: There are many acceptable options to establishing QNBCG and RRCG stands. Then legumes can be added to those stands. Other Fact Sheets discuss planting and establishment procedures.

A cool season grass (annual or perennial) and legume mix can also be over-seeded with crabgrass. Or, a cool season grass and legume mix may be managed for volunteer crabgrass in the mixture. . If no cool season grass is involved the legume can be fall seeded and crabgrass overseeded into that stand during spring. If the cool season legume and crabgrass are both spring planted, that can be done as a seed mixture during spring.

When summer legumes and crabgrass are grown together, they can be seeded as a mixture. Or, either one can be added to the other as in interseeding into an existing stand. That is usual in existing alfalfa stands when these crabgrass's are added to a thinning alfalfa stand.. Crabgrass and warm season legume mixtures may also include other summer grasses such as Piper sudangrass, German millet, pearl millet, browntop millet, or bermudagrass, etc.

Seeding rates should be about half the usual good seeding rates for full mixture stands. Check on that for a particular mix. For a QNBCG and RRCG and legume mixture, use one to two pounds pure live seed per acre. That usually gets an acceptable stand of crabgrass for this use and leaves space for the legume.

Fertilization of Grass & Legume Mixtures: Any time a legume is used, phosphorus, potassium and lime should be supplied for the legume according to soil test results. That amount will be adequate or surplus for grasses. Research and experience show that about 30 to 50 pounds actual nitrogen can be used on these mixtures in the drier regions of about 35 inches rainfall or less without serious harm to the legume stand. The rates can go to 50 to 75 pounds per acre actual nitrogen in more humid areas above the 35 in rainfall belt. **In all cases the forage mixture should be properly rotationally grazed or hayed to favor the sustainability of the legume stand and production.** Some producers may choose not to use any nitrogen fertilizer and have the legume supply what it can. That is acceptable, but may reduce overall forage yields compared to what is possible. See prior information about the work in North Carolina.

Listing of Successful Mixtures:

- Cool season annual or perennial grasses, legumes and crabgrass : These legumes could be crimson clover, arrowleaf clover, red clover, other clovers , Austrian winter peas, or hairy vetch. In cool season perennial grass mixtures, the legume could also be white clover or other perennial legumes.
- Any cool season legume and crabgrass: The combination could be any clover, hairy vetch and Austrian winter pea and crabgrass. Cereal rye , wheat , oats , and barely and vetch and crabgrass make a good 3-way forage mixture.
- Alfalfa and crabgrass. Thinning alfalfa and these crabgrass's make a really nice mix. This mixture is one of the best we have seen.
- Annual lespedeza and crabgrass
- Southern cowpea and crabgrass. These mixtures tend to be better for hay than grazing. Cowpeas do not re-grow very well.
- Soybean (hay or grain type) and crabgrass. Same as above.
- Mungbean and crabgrass. Same as above.

Other Information: This subject is rather extensive and all things cannot be covered herein. Feel free to contact us for more input.

Please review our farm web page at: redrivercrabgrass.com There may be some ideas there.

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”, “Agriculture Publications” , search for titles with the word “crabgrass” and click on that for more information about crabgrass forage.