



September 15, 1992

TECHNICAL NOTE - PLANT MATERIALS TX-4

Re: Kleingrass Harvest

Kleingrass harvest for maximum seed production is a game of "Timing" and "Proper Decision Making." This usually occurs twice a year--first harvest in late May or early June, and second harvest in middle to late September. There is no major change in plant appearance (color, etc.), so a close check of seedheads is needed on a daily schedule. An "average" location in the field should be selected for your inspections. The seedhead will have ripe, semi-ripe, and even still-flowering seed on it. The time to harvest is when the largest percentage of the seedhead is ripe or near ripe and shattering has started. Some seed will still be green in appearance but will finish maturing during and after the drying process.

There are at least three major methods that have been used for harvesting kleingrass. These are:

1. Brush stripping
2. Windrowing with combine pickup
3. Direct combining

Direct combining has proven to be the best method of harvesting at the Knox City PMC. As this is a "one-shot" method, when seed approaches the "hard-dough" stage of maturing, a daily check is needed to determine when to start combining. When the largest percentage of mature seed is still on the seed stalk, the time is "RIGHT."

Consideration should be given to upcoming weather conditions such as: high winds, heavy rains or combinations of these. Hot, dry weather is also a problem due to ripening and shattering occurring at the same time.

Kleingrass is one the easier species to combine. Height of header cut and speed of combine are determined by the amount of lodging occurring in the field. This is a common occurrence with heavy fertilizer and extra moisture. Take only as much foliage as is necessary to gather most or all of the seedheads. Speed should be slow enough not to over-load thrashing areas. Cylinder speeds will vary from 750 RPM to 950 RPM, according to the brand

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of machine used. Concave clearance usually is about 1/4-inch front and 3/16-inch rear. Sieve setting is 1/2-open top, 1/8-open bottom (or middle) and 1/16-open bottom, if it has three sieve separator. Very little air is necessary, only enough to help keep "override" moving to rear of machine. A close check of tailings should be kept to assure there is no major adjustment needed. Good seed can be blown out the rear of the combine if too much air is applied. All unnecessary openings (bolt holes, auger covers, etc.) should be taped to prevent loss of the small, smooth kleingrass seed.

A scalper is very helpful for removing some of the excess leaf and stem materials from the harvested product, but is not a must. However, it helps with the drying time. The harvested material must be dried to storageable moisture levels before cleaning and storing. Bulk materials can be spread on a concrete floor or tarp, out of the sun, to a depth of 4 inches or less. Stirring once or twice daily is needed to insure proper drying with no heat build-up. Blowing air across the seed with ordinary box or oscillating fans will remove the heat. Bins or boxes with false bottoms for directing air upward through the seed can be used also. Forced air drying is helpful when humidity is high or the seed material is extra moist, especially if the air can be slightly heated.

After the seed has been cleaned, a representative sample should be sent to an approved testing lab for a complete analysis. If seed is for retail distribution, a current analysis, which is valid for 9 months, should be maintained. Store seed in a cool, dry rodent-free area.

After harvest, excess litter should be cleaned up from the field to facilitate preparation for the next crop.