BEVERLY GREENWELL: Then how does it happen that so many seed dealers do not know where their seeds came from?

CLARK BROWN: This is a big problem, but basically it is probably because some dealers do not keep sufficient records.

WILBUR BLUHM: In regard to the boron relationsip to bud abortion in Colorado blue spruce, in tests I have,been involved with we could find no correlation between boron levels and bud abortion.

VOICE: Does Clark Brown's company use X-ray examination to determine the condition of his seed.

CLARK BROWN: No, we do not. We depend only on visual examination and on cut tests.

STRAWDUST — AN ALTERNATIVE GROWING MEDIUM

DICK TUEFEL

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Because of the diminishing supply and increasing cost of barkdust and sawdust which we were using in our nursery, we have developed an alternative container medium, using materials which are locally availably in abundant supply.

This new medium is made from wheat straw that is resin-impregnated in a special treatment process. Treatment of the straw is necessary because straw normally decomposes rapidly, and requires large amounts of nitrogen when it does. It also shrinks rapidly and is full of seeds.

The treament process is as follows:

1. Bales of straw are placed in a tub grinder which rotates and feeds the straw to a hammer mill.

2. The straw is then conveyed to a mixing auger where the first set of chemicals are injected.

3. This mixture is then augered to the next machine where the second set of chemicals are sprayed on the straw. It is then augered to the cube dies where it is extruded into blocks. The extreme pressure of this extrusion process forces the chemicals into the straw and also compresses the straw so there will be little shrinkage later. The heat generated by extrusion of the straw and chemical mixture kills all seeds that may have been present and sterilizes the material.

4. The cubes are then conveyed to a storage area where they are ground to the desired particle size by a hammer mill. This produces the final product which we call "Strawdust".

This process changes the straw in six ways:

1. It is made longer lasting.
2. The pH is changed, ranging from 5.8 to 6.0.
3. It is sterilized.
4. Nitrogen in a slow-release form is added.
5. It is compressed to keep it from shrinking in the container.
6. It is made non-flammable.

Uses for Strawdust:

1. A container growing medium.
2. Soil builder in landscape jobs and gardens.
3. A mulch, to protect plants from heat, cold, and drying.

Strawdust is less expensive to use than bark or sawdust because of the fertilizer value it contains. Also, the pH has been adjusted and it has been sterilized.

Strawdust has been used in our nursery since 1979 and has been under test by Oregon State University since 1981. These tests shows that a mix of 70% Strawdust, 15% peatmoss, and 15% pumice, with no fertilizer or amendments added, has out-performed bark mixes with all the normally recommended amendments added.

Strawdust has U.S. and foreign patents pending.

COMPUTER CONTROLS FOR GREENHOUSE ENVIRONMENTS

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INTRODUCTION TO COMPUTERS

I am basically a nurseryman and I want to have a smooth, efficient controlled nursery operation. My major problem was finding a reliable system for watering and heating my nursery beds. Having a fair background in electronics, I turned to this field to solve my problem and I feel that it has been nicely accomplished.