To do this thing very simply, I have prepared a text which I will follow.

Mr. Chase presented his paper on "Rooting Junipers in the Open Field". (Applause)

ROOTING JUNIPERS IN THE OPEN FIELD

Henry Homer Chase Chase Nursery Company Chase, Alabama

The beginnings of the field production of junipers from hardwood cuttings can be traced back to a wonderful old man who lived in Jeff, Alabama, whose name was Lawson Kelly. He was a part of the firm of J. O. Kelly and Sons Nursery. From discussions with old timers in our neighborhood such as Mr. C. J. "Pappy" Hayden of Athens and Mr. Lawson Kelly's nephew, Mr. Thompson Kelly, it becomes apparent that "Uncle Lawson" as he was known to all of us, first began his experimental plantings of hardwood cuttings of junipers as early as 1924. We can only assume that his first varieties were of the J. communis types such as ashfords, hibernica and the J. chinensis types such as pfitzeriana and excelsa stricta. By 1928, Mr. Kelly was producing this kind of material in quantities approaching the 500,000 mark and was classing among his customers such people as D. Hill Nurseries of Dundee, Illinois, Onarga Nursery Company of Onarga, Illinois and our own concern, the Chase Nursery Company.

Two factors in our area have strong influences on our propagation of juniper cuttings in the field. First is our 52 inch annual rainfall, and second is our soil which is a heavy, red clay known to geologists as "de-

catur clay".

This method of propagation is extremely simple and it is done just exactly as we do our deciduous shrubs, except that we attempt to get it done in the fall, usually in September or October. We use a lot of water

in the planting operation.

The ground is prepared as it would be for any other crop by breaking it up with disc turning plows, then harrowing with disc harrows, and finally by dragging it with either a drag harrow or a pipe frame. The furrows to receive the cuttings are laid off with a bull tongue plow arrangement mounted on a John Deere tractor. We try to prepare a fairly wide and relatively deep furrow. Water from a tractor drawn tank is poured into the furrow immediately prior to planting. The cuttings are stuck just as close together as it is possible to get them and they are actually planted in the water or in the mud.

The cuttings are taken from the stock block directly to the planting area in burlap rolls. These cuttings are collected from old plants which we have saved for this purpose. Some of these stock plants have been producing cuttings for us for as long as 15 years. After the cuttings are placed in the furrow in an upright position as close together as possible, a small amount of dry dirt is raked into the furrow on either side of the cuttings more to hold them upright than anything else. We then follow this with another application of water. It is our belief that this large quantity of water tends to remove all of the air from around the cutting

thus sealing them firmly into the ground.

As soon as the moisture has been dispelled sufficiently for a tractor or a mule drawn cultivator to run conveniently, we give them an initial cultivation which is usually enough to get these cuttings off to a good start. At this point in the operation, we go through the planting with a pair of hedge shears and cut these cuttings back to within 3 or 4 inches of the soil. The job is then complete except for the control of weeds and grasses throughout the following season.

Approximately a year after these cuttings have been planted we run under them with a small digging blade without a lifter in order to force additional root breaks. At this stage of the game, it is possible to start harvesting the crop, although a more ideal time to transplant the rooted cuttings seems to be in the following spring, prior to bud break.

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(Editor's note. Mr. Chase concluded his discussion by showing colored slides of the propagation sequence used to root evergreens in the field.)

MODERATOR FILLMORE: Have we any questions for Mr. Chase?

MR HOOGENDOORN: Do you have to keep the cuttings under constant irrigation?

MR. CHASE: It has been our observation over the years that the poorer the ground you plant these things in, the better they root. No, Case, we do not irrigate them unless we get severe burning, wilting or drought, and then only periodically.

MR. HOOGENDOORN: How about fertilizer?

MR. CHASE. No fertilizer is used

DR. ALFRED M. S. PRIDHAM (Ithaca, N. Y.): Could you tell us how your rainfall is distributed over the year?

MR. CHASE: I can't break it down. It goes from a usual six inches in January to a low of 3.25 inches in May. At times, we don't get any for a crack of six weeks at a time.

MODERATOR FILLMORE: Any further questions? Well, I will now turn this meeting back to President Nordine. I thank you very much.

(Applause)

PRESIDENT NORDINE: Again, we have just a few announcements that will only take a minute. Please do not forget to submit questions for the question box, which will be held tomorrow evening. Those of you who have attended these meetings before know the importance of placing questions in the box. Those of you who are new, are invited to submit any and all questions that you might have Jim Wells has suggested that if any of you have slides of any new, different, or peculiar plants, bring them tomorrow night and there may be a chance to show them.

We have maintained an enviable record of meeting on time. Tomorrow morning we have a little different situation. The program begins an hour earlier than it did this morning, but we will still plan to start on time tomorrow morning.

With that, we send you on your way. The session recessed at 4:30 o'clock