

PROPAGATION OF JUNIPERUS CHINENSIS TORULOSA

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Juniperus chinensis torulosa is an upright juniper. It's common name is Hollywood juniper - it has a very vigorous growth. The plants are hardy and will take considerable cold weather; they like to be grown in a sandy, loamy soil, but are really not particular. They also like a sunny location. They can either be propagated by grafting or cuttings. Grafting is expensive so that's why the Leonard Coates Nurseries started trying to root them from cuttings. We tried them the regular way, just putting them in a greenhouse with bottom heat, but had very poor luck. In October, 1959, we started a couple of flats which were put directly outside, with the idea of stimulating rooting by letting them stay outside for some time. But then we noticed callusing on the cuttings in about three or four months, so we decided we'd do a little experimenting with them. We took them back inside - to the potting shed - and treated them with Hormodin 3 and put them this time in the greenhouse with bottom heat and then they rooted very well. This gave us something to work on. So on October 28, 1960, we started taking cuttings from plants in five gallon cans from stock plants that had nice fresh growth with one year old wood which was growing well; the branches were rather long and we could get three or four cuttings from each one.

Also we would prune the plant and shape them at the same time. We first started from the tip working down the stem, making the cuttings 3 or 4 inches long, putting them in the mixture of two parts very coarse sand and one part peat, but without any kind of hormone. Then we took them directly outside into the lath house and let them stay until they started to callus, which takes about four months. We left ours a little longer than that because we couldn't get around to bringing them back in to give them the other treatment. On May 10, 1960, we brought them back in and started taking them out of the flats, breaking off the calluses. Some of the callus was quite large while some cuttings didn't have any. Anyway we dipped them all in Hormodin 3, then started resetting them into the same flats we'd taken them from. We took them this time to the greenhouse and put them on bottom heat at about 78° to 80° F., letting them stay about 60 days when they were ready to pot. But we don't like to pot directly out of the greenhouse so we took them outside into the lath house again to harden off. It was September 1 before we got around to potting them up. Then we came out with about 60-65% rooting.

Almost all the others that were not rooted were still in good shape, so we again dipped them into the Hormodin 3 (the ones that were not rooted), put them back into the greenhouse on bottom heat again. At this time (October) they are starting to root again, so I'm sure that we'll come out with about 75% rooted. That, for us, is pretty good. Probably everybody else does better. I don't know. Anyway, that's the way we did it this year.

Next year we might do it differently. I know there are several things we'd like to do differently. The tips do not root as well as the secondary cutting underneath the tip, so next year we probably won't make so many of the soft cuttings. The farther down the stem, the better they root, it seems to me. Down the sides we make some almost as big as a pencil and they rooted also. I said in the beginning that coarse sand and peat would work good. There's several other things you could use. We experimented with some granite grits. In peat they do well. Small pea gravel works just as well. The only thing you want is real good drainage when you put them out to stay out through the winter rains. You have to have good drainage.

MR. MARTIN USREY: Julius, did you have them in a cold frame to begin with?

MR. JULIUS GORMAN: No, they were started directly out in the lath house.

VOICE: Where did the roots appear on the cutting after the callus had formed?

MR. JULIUS GORMAN: About a quarter of an inch up the stem, not on the bottom.

MR. HERMAN SANDKUHIE: I know on Juniperus chinensis pfitzeriana we have noted that by scraping the sides of the cuttings we can initiate roots down the side. I think this is brought out by Wells in one of his publications.

MR. JULIUS GORMAN: We tried that on torulosa earlier but it didn't make much difference. We tried wounding.

MR. HERMAN SANDKUHLE: What type of greenhouse or prop house do you operate in - is it a closed house?

MR. JULIUS GORMAN: It's a closed house, yes - with high humidity all the time, but not under mist.

MODERATOR MOREY: I have just one question. Do you feel that the time of year and the conditions prevailing during the time that they're rooting is important, or could you switch the thing around any time that you can get cuttings?

MR. JULIUS GORMAN: I don't think you could. I'd like to try that. I don't think you could change it at all. We tried so many different ways before, that I'm sure that you'd have to stay pretty close to these conditions and this time of the year.

MODERATOR MOREY: Do you feel that the condition of the plant that you're taking cuttings from is important?

MR. JULIUS GORMAN: It is. Anything that's fast growing. Not real fast, but it has to be one year growth.