

I believe that this method of propagation from very young micro seedlings helps to prevent spread of viruses, of which there are many.

NOTE: No hormone or bottom heat is used. Copper naphthenate (3%) mixed with 50% kerosene is used for treating the boxes and net. The boxes measure 71cm × 15cm × 5cm.

ROSE ROOTSTOCK, 'DR. HUEY', IN SOUTH AUSTRALIA

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South Australia is one of the main rose producing states of the Commonwealth, especially in proportion to its population. According to the latest statistical collection in 1974-75, almost 600,000 rose plants were grown; over half of these were sent interstate. The traditional rootstocks have been *Rosa indica major* (commonly but incorrectly called 'Boursalt') for dwarf budding and *R. canina* for stem or standard production. Both of these rootstocks suffer from certain disadvantages. *R. indica major* can give very erratic bud-take during autumn budding and will sucker under some conditions. *R. canina* also suckers badly and gives unreliable strike of cuttings.

For these reasons, several South Australian growers are turning to the rootstock 'Dr. Huey' for both dwarf and stem production.

'Dr. Huey' was originally bred as a garden rose in 1914 by G.C. Thomas in California, U.S.A. and it was not until 1940 that its potential as a rootstock was recognized but by the early 1950s it was being grown as the major stock in California. It tolerates alkaline soil and dry harsh summers very well — the same conditions experienced in Southern France, Spain, Italy, and, of course, South Australia, where it was first tested in small quantities about 1955. Nothing more was done with it until the early 1970's when a few nurserymen, including our company, decided to tests its potential as an alternative for growing two-year-old roses, in order to overcome the often disastrous bud take of *R. indica major* for late summer budding.

Since that time it has proved to be very suitable for South Australian conditions, both as a nursery plant and as the eventual garden plant. Its features may be summarized as follows:

Growth — annual cane up to 2m in length, fairly upright habit, maintaining a good thickness throughout its length, but sometimes tending to be rather thick at the base.

Bark is smooth and with only a few thorns. The bark separates and bends back easily for T-budding, and can be budded quite soon after the cuttings have been planted out — from about the half-dozen leaf stage onward.

Foliage is round and glossy, of orthodox form. Unfortunately, it is susceptible to powdery mildew and rose rust infection — its main disadvantage — but since the advent of some excellent systemic fungicides for these diseases, this is not the problem that it used to be.

Habit is apical dominant, so much so that stem roses need not to be de-eyed above ground level, as a couple of rubbings at the appropriate time will control side shoots adequately.

Roots radiate evenly from the callus and form quite a stout ring of roots with plenty of supporting fibre. However the roots on two year plants may be almost too large for easy packing!

Strike percentage of cuttings is usually well in excess of 90% provided the soil is warm and not excessively wet, such as during late summer and autumn planting.

De-eyeing is easy because of the fairly wide spacing of nodes, which are nicely prominent. However, the wood is tougher than usual and requires a little more effort to make each cut.

'Dr. Huey' makes far better growth in container culture than *R. indica major* and since there is a steady movement to containers in South Australia it appears to be the best proposition to date. Our company has planted cuttings of 'Dr. Huey' into containers most months of the year and found that they strike well in all but the wettest (and coldest) periods and, conversely, have given fair results when planted without shade or mist during a 35°C heat wave in late January.

For both field and container production 'Dr. Huey' can be headed two or three weeks after budding and be forced into a plant almost the same size as *R. indica major* (which is a notorious stock for forcing).

I appreciate that different climates and soils call for different rootstocks, but I am confident that 'Dr. Huey' rootstock will prove suitable for roses in the greater area of Australia.