

QUESTION BOX

MODERATED BY BEB MCCOWN AND DICK BIR

DEB MCCOWN: Question for Jack Alexander. Which species would you recommend as the best *Aesculus* seed rootstock?

JACK ALEXANDER: Both *A. hippocastanum* and *A. glabra* will work fine. *Aesculus hippocastanum* will give a larger root stock.

DEB MCCOWN: Question for Tom Intven. Could we have a source for the budding tape.

TOM INTVEN: Shigyo Co., 1877 Lombard St., San Francisco, California 94123; Phone: 530-582-4910; FAX: 415-440-7328.

DEB MCCOWN: Question is for me: Is adventitious root replacement on Stage 3 hardwood cuttings common for most species or more of a problem for herbaceous species?

DEB MCCOWN: I have never done any research on this subject, however back in 1989 research with birch, amelanchier, and red maple compared in vitro vrs. ex vitro and showed that in vitro roots had big cortical cells while the ex vitro had normal roots in cross section. As for the herbaceous cuttings I can not answer as I do not do herbaceous plants.

DICK BIR: Does anyone have experience using phosphoric acid for alkalinity reduction? Does phosphoric acid have a detrimental effect on PVC or other plastic pipe?

BILL BARNES: Yes you can use it but you will need to remember to adjust your fertilizer level for phosphorus and consider the fact that it may interact with some cations. It does not have a detrimental effect on PVC pipe.

CAMERON SMITH: If you use it you will get more cementation of the soil mix and it is more expensive than sulfuric acid.

DICK BIR: If you go to the commercial horticulture website at North Carolina State University you will find a good discussion on this subject. In short they do not recommend the use of phosphoric acid.