

Technical Session IV
SOIL TESTING -- ITS APPLICATION

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The mechanics of applying soil test results to our own Nursery, at times, give us headaches. We often depend on the recommendations of soils people who many times think along agricultural lines.

Some years back, we ran into difficulty at our Nursery as a result of an application of too much limestone. This, in turn, created ideal conditions for Rhizotonia fungi build up, causing us tremendous problems with root rot and damping-off.

This is an example of a soil test that had disasterous results for us, because the recommendations were made on the basis of agricultural crops. They were not based on the needs of a unique agricultural crop, the forest seedling. This points out the necessity of the nurseryman having some understanding of the nutrient needs of forest seedlings.

The nurseryman, applying the results of a soil test analyzed away from the nursery, must keep in mind past cultural practices. Such items as types of cover crops used, abnormal amounts of wood fragments , etc. , may not necessarily show up in a soil test.

Those of us who were fortunate enough to attend the Soils Conference at Syracuse in January, will remember Dr. Armson's work on the up-take of nutrients during different times of the year. This may be modified by the types of fertilizer we use for top dressing seedbeds when deficiencies show up (particularly for nitrogen late in the growing season when the tree seedlings show yellowing). Here we may need to apply several light applications of a solubl - nitrogen fertilizer, or possibly one application of a less soluble fertilizer. I would expect this to be particularly true on a sandy soil where there is a rapid loss through leaching.

I am no expert on soils or soil testing, but it appears that we have to maintain close ties with the soils people so that we can both see the results of our applications. In lieu of this relationship, we as nurserymen must be better informed in soil chemistry.