## FRIDAY AFTERNOON SESSION December 7, 1973

MODERATOR ZONDAG: The first paper of this afternoon's program will be presented by Dr. Paul Smeal who is going to tell us about efficiency in the nursery.

## EFFICIENCY IN THE NURSERY

PAUL L. SMEAL

Department of Horticulture
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

Efficiency may be defined as the quality or degree of being efficient or, in production terms, a comparison of output with cost in energy, time, money, materials, labor, etc. Efficiency defined in its simplest term is to accomplish the task with the least amount of time and effort. Nursery efficiency and industrial management are similar in that both refer to the highly organized modern method of carrying on production of industrial operations.

As one looks at industrial management, the growth of manufacturing requires special supervision of machinery and the elimination of inefficiency. The first sustained effort in this direction was made in the 1880's by F.W. Taylor of the Midvale Steel Company. The motions of workers were studied to speed up production by cutting out excess movements. Such time and motion studies of the flow of materials through the plant became a major item of inquiry, as did product design. Relations with workers became the subject of industrial psychology. Soon after, much attention was given to improving worker morale by providing better facilities and new incentives, such as a chance for advancement and, occasionally, a voice in management. Other items that have come to be the concern of management include safety devices, better sanitation, rest, eating, and recreation facilities, health insurance, and pensions.

Efficiency should have top priority in any nursery, and it is vital to all personnel, from the owner to each individual employee. To help put efficiency into the proper perspective, it may be desirable to ask what, when, where, how and who is efficient in the nursery.

"What is efficiency", has previously been defined as accomplishing the given task or job with the least amount of time, materials, effort and expense.

When does efficiency take place? It should be taking place at all times. The question in the mind of the manager, foreman and every employee should be, "is there a more efficient way to accomplish the task?". All ideas should be given, received and tried. The employee generating good ideas should be rewarded, encouraging fellow employees to become interested in improving all phases of production. Have the foreman and the laborers develop goals and when these goals are met, reward them with an incentive. Set realistic goals that can be reached and, once reached, raise them slightly higher and make the incentive such that the employee will excel to reach these new goals.

Where does efficiency take place? In respect to management, is the efficient planning and execution of their responsibilities apparent? This could be anything from planning the production schedules, production practices, harvesting and marketing, to answering the correspondence promptly. Are the foremen organized and efficient in outlining the jobs and tasks to employees responsible to them? Are the tools, equipment and supplies readily available? Have the individuals become responsible for their tools and equipment? If you have been able to answer yes, then you are on the way to perfecting efficiency in your nursery.

How is efficiency accomplished? Someone in the management organization must be given the responsibility and authority to make changes to improve efficiency. It does little good to generate new ideas and then never try them or attempt to adopt them within the organization. The best way to improve efficiency is to tell yourself that there has to be a better, faster, less expensive way to accomplish the job. Then, utilizing the many resources available to you (your fellow nurserymen being one of the largest resources, as well as salesmen, university personnel, etc.), attack the problem at hand.

In conclusion, remember the five P's: Prior Planning Prevents Poor Performance. There will be efficiency if poor performance is eliminated.

MODERATOR ZONDAG: Thank you, Paul. Our next speaker is John Roller who will tell us about a program for growing crabapples.