## Kehr to Run AMS Pollen Bank

The American Magnolia Society is going to have a Pollen Bank, courtesy of the Society's former secretary-treasurer, Ginnie (Mrs. W.B.) Melnick, who has a reputation for shaking the bushes until things get gone, and August Kehr, who finally has some time on his hands and has volunteered to be the "banker."

Until he retired last year and moved to North Carolina, Dr. Kehr was staff scientist for vegetables and ornamentals crops production at the U.S. Department of Agriculture's research headquarters in Beltsville, Maryland. It was Dr. Kehr who persuaded one of his former students at Louisiana State University, now Dr. Yu-Chen Ting of Boston College, to obtain viable seed of the rare Chinese Magnolia biondii during his trip to that country a couple of years ago. Thus M. biondii has been brought to the U.S. for the first time, and plants eventually will be available to Society members. Dr. Kehr also is president of the American Rhododendron Society.

The Pollen Bank will make it easier for AMS members to obtain pollen from desired Magnolias for breeding purposes through contributions made by other members. The Pollen Bank is expected to join the Society's successful Seed Counter as a substantial membership benefit. It can be an important service for those interested in breeding Magnolias.

Since this is the first official notice to members, pollen probably will not be contributed or available until the 1980 spring flowering season. Anybody who has a Magnolia or has access to one in flower can contribute pollen to or obtain pollen from the bank.

Here are Dr. Kehr's instructions for collecting and shipping pollen to the bank:

- 1. Collect Magnolia buds that are one day from opening.
- 2. Remove tepals and peduncle, slice off the tip of the androecium to obtain a flat surface, then invert the androecium on a clean glass surface to dry.
- 3. As it dries pollen will fall on the glass. Drying can take place in the refrigerator with good results. The time needed for the anthers to open and shed their pollen can

vary from a few hours to 3-4 days, depending on the species and processing procedures.

- 4. Collect the pollen with a camel's hair brush into a gelatin capsule, size 000 or 00. Disinfect brush in alcohol and dry before using it a second time to collect pollen from another kind of Magnolia to avoid mixing pollens.
- 5. Label the pollen with name of Magnolia, location of tree, date of collection, and name of collector or contributor, on a small strip of paper, inserting one end into the capsule as it is closed.
- Pack the capsules into a 35 mm. plastic photo film roll container or a clean and dry pill bottle with cotton on top and bottom.
- 7. Send the container by first class mail immediately, within 4 days of collecting, to:

August E. Kehr AMS Pollen Chairman 240 Tranquility Place Hendersonville, N.C. 21839

- 8. A list of pollen available will be sent to all pollen donors, who will have priority when orders are filled. Society members will be notified of types available in the AMS Newsletter.
- 9. There will be a charge of \$1 per capsule of pollen and orders will be mailed just prior to the flowering season. The amount of pollen to be sent will depend on the quantity available to the Pollen Bank. Remember that what may look like a small amount of pollen can consist of hundreds of thousands of grains, enough to pollinate many flowers.
- 10. Pollen from the Pollen Bank should be stored in a freezer at 0° F (-18° C) over a bed of calcium chloride, dried milk powder, or silica gel to prevent moisture from making the pollen unviable. Any unused pollen may be refrozen; thawing and refreezing may be done several times without harming the pollen. Most pollens should have a high percentage of viability after several weeks of storage and some may keep well in storage as long as a year.

Other information will be published after the Pollen Chairman has gained more experience in operation of the Pollen Bank.