lication, carried a good article on the origin and development of

this red delphinium within the last year.

Mr. Jolly Batcheller: When Dr. Doorembos got his Ph.D. at U.C.L.A., he took the seed back from a native plant. I don't know whether he was actually in on the development of it or not.

Mr. Dara Emery: The man who did the work on the hybrid delphinium was Legro.

DR. DENNISON Morey: In connection with the *cardinelli* hybrids, if you're anticipating development work, get in touch with Dr. Gustav Melquist at Storrs, Connecticut. He initiated work at U.C.L.A. with *cardinelli* twenty years ago and has been carrying it on with some of the Pacific hybrids. I think he is now concerned with rhododendrons. I know him well enough to know that he would have material that the *cardinelli*'s left and it might be of interest to you.

## THE ROLE OF RESEARCH IN PLANT PROPAGATION<sup>1</sup>

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## THE EFFECT OF SEVERAL ANTI-TRANSPIRANT MATERIALS ON APPARENT TRANSPIRATION OF SELECTED ORNAMENTAL PLANTS<sup>1</sup>

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Although anti-transpirants have been known and used for more than fifteen years, there is little information based on experimentation concerning the effects of these materials on transpiration. Before considering some of our recent work with these anti-transpirants, let us briefly review what is meant by transpiration and how it occurs.

Transpiration is the evaporation of water from plant tissue. Basically it follows the physical laws which govern the evaporation of water; however, there are modifications based on plant structure. Woody twigs may lose water through the lenticels; however, the major path of water loss from the plant is through the leaves.

An examination of the structure of a leaf will help to understand transpiration more completely (Figure 1). Both the upper and lower surfaces of a leaf are covered with a layer of

<sup>&</sup>lt;sup>1</sup>These studies were partially supported by funds suppied by the New Jersey Association of Nurserymen and the North Jersey Metropolitan Nurserymen's Association.