



Australian News and Information Bureau

HOPPING MOB—Kangaroos and wallabies, the latter being a small species of kangaroo, graze on hills and plains, hopping on hind legs with the aid of a strong tail.

AGRICULTURE

Spray Speeds Up Pruning

A spray-on chemical growth regulator helps prune plants more quickly and efficiently, relieving growers from a time-consuming chore

► **PLANTS** can be pruned efficiently and effectively with a spray-on chemical growth regulator developed by U.S. Department of Agriculture scientists.

Large numbers of plants can be treated quickly with a milky looking liquid that can be applied with ordinary spray equipment, thus relieving growers from a tremendously time consuming manual chore.

Naturally occurring chemicals extracted from coconut leaves and animal fats are processed into methyl esters and fatty acids and then combined with an emulsifier and water. When sprayed on entire plants in the early stages of development, the solution prunes by selectively killing the meristem or formative tissue that can divide an infinite number of times. The rest of the plant, however, remains unharmed.

The non-toxic quality of this growth regulator sets it apart from other chemicals that effectively retard or stop growth but also cause undesirable side effects.

These natural chemicals reportedly do not add harmful foreign substances

as synthetic chemicals sometimes do. Within 15 minutes from the time a plant is sprayed with enough solution to wet all surfaces, its leaves virtually kill themselves and turn black. The tip wilts within 30 to 60 minutes and within three to five days the dead tissue turns tan.

Sprays of fatty acid and methyl esters are still in experimental stages but seem to work successfully on a variety of plant species including petunias, carnations, elms and tobacco. Inactive or dormant plants, and waxy species such as holly trees are not affected by these chemical pruners.

Besides saving time, the sprays stop the spread of plant viruses that can occur when horticulturalists handle plants for manual pruning.

Eventually, hedges may be styled and Christmas trees shaped by the simple application of chemical sprays.

Drs. H. M. Cathey, G. L. Steffens, N. W. Stuart and R. H. Zimmerman of the Crops Research Division, U.S. Department of Agriculture, Beltsville, Md., reported the development in *Science*, 153:1383, 1966.

CONSERVATION

Federal Controls Needed For Kangaroo Industry

► **AN AMERICAN** conservationist has suggested government controls to protect the country's kangaroo industry.

Control by the Australian government would develop and stabilize the industry, and protect the kangaroo from indiscriminate slaughter, Dr. R. E. Dasmann, senior associate in the American Conservation Foundation, Washington, D.C., told a wild life seminar in Adelaide.

Maintenance of the kangaroo meat and hide trade is, in the long run, important for the conservation of the kangaroo itself, he said.

Only if the economic value of the meat and hide trade is recognized is it likely that the kangaroo will be protected from uncontrolled shooting as a resource of some value to the nation.

"But the industry is so unstable, it is a very risky thing for private enterprise to tackle," he said.

Consensus of the seminar was that state governments should handle marketing of the meat and hides, thus bringing in a substantial income to the Government.

The harvest of kangaroos could thereby be kept at a level the population could support. Government control of skinning and preparation of the meat would ensure the production of high-quality meat.

"I think this type of approach would do much not only to protect the kangaroo as a species but to stabilize the industry and bring some revenue into the state faunal departments," Dr. Dasmann said.

AGRICULTURE

Air-Conditioned Dome Helps Preserve Corn

► **AN "AIR - CONDITIONED** corn crib" has been developed that will help solve one of the most critical problems in the corn industry—the preservation of field-shelled corn at harvest time.

Called a Frigidome storage and conditioning unit, the new structure developed by Frigidome Corporation, Peoria, Ill., is an insulated, maintenance-free, aluminum dome that utilizes processed cold air to preserve and condition corn. Heat pumps and specially designed controls and ducting systems maintain precise temperature and humidity surveillance inside the "crib" to produce quality-controlled corn.

Corn is loaded directly from the field through the top section of the dome, while a distributor scatters it evenly inside. As it is being loaded, the corn is cooled (35 degrees F. or lower) to remove a percentage of its water and to prevent mold growth.