

RUBBER PLANTS Large-Scale Planting In South Australia

CANBERRA, Jan. 12.—Definite progress is reported by the Council for Scientific and Industrial Research in its intensive experiments with seed for the ultimate production of rubber from the Mexican plant guayule and the Russian plant koksagyz.

The council has been growing guayule experimentally for 11 years. New seed of the plant, of which Australia recently received a sample, grows plants containing 20 p.c. of rubber instead of a previous 6 p.c. Containing 20 p.c. of resin, which is valuable for plastics, the rubber is spread right through the plant. At four years the guayule is claimed to produce 2,100 lb. of rubber an acre—America counts on a ton an acre.

The council is concentrating on seed production in 100 acres of nurseries at Canberrra. Canberrra is ideal for seed cultivation, but the limestone country of South Australia is considered best for large-scale planting. The council is therefore sending the seed to the Waite Institute of South Australia, which will organise sowing.

By a special heat method of treating the seed, the council's scientists have increased the germination rate by 700 p.c.

With the Russian plant, a start has had to be made from scratch. The first bag of seed arrived from Russia last August, but the last 1,000 kilograms of the seed has now been received. State departments are co-operating in experiments with the seed, and the plant is being tested for rainfall, soil and manure requirements. Each is a tedious process involving precision experiments in hundreds of small pots.

Soil has been brought from all parts of Australia for the experiments. The plant is grown like carrots and deposits its rubber in the roots. Its flowers and seed are like those of the common dandelion. One of the major problems is the collection of the seed.

Son Of Mr. C. H. Voss Killed

LONDON, Jan. 12.—AAP. Michel, younger son of Mr. C. H. Voss, has been killed in a flying racing accident in Canada. Michel escaped from Paris with his parents at the collapse of France and went to England from Bordeaux. Another son is serving with the British Army overseas. [Mr. C. H. Voss was the Australian Commonwealth trade representative in Paris from 1919 until the war.]

TESTING RUBBER PLANT

Seedlings At Waite Institute

Brought to this State because of the suitability of climate, 1,000 seedlings of the guayule rubber-producing plant, a shrub-like native of Mexico, arrived at the Waite Research Institute from Zamorra yesterday and during the afternoon were planted in boxes at the Institute nursery.

The director of the Waite Institute (Professor J. A. Prescott) said that the experiments to be conducted were only a part of the plan of the Council for Scientific and Industrial Research to investigate the possibilities of rubber production in Australia. The Malayan rubber tree was being tested in Queensland and the Russian dandelion rubber plant would be tested in districts thought suitable.

Professor Prescott explained that arrangements had been made with the Department of Agriculture, Josephine College, and the Lands Department to transfer the plants later from the nursery to various districts in the State, the idea being, not so much to produce rubber as to ascertain if conditions in certain districts were suitable for their culture.

From the guayule plant small quantities of rubber might be obtained after a year's growth, but in America the plants were usually two years old before being considered productive, while in some instances they were allowed to reach five years.

Professor Prescott pointed out that guayule had not been extensively grown in America, it being mainly used for mixing with synthetic rubber required for very special purposes. However, since war the areas planted had been increased, although in normal times it would probably not be economically competitive with the talayan rubber tree.

Dr. H. C. Trumble, Professor of agronomy at the Waite Institute, would control the experiments in South Australia.

Seedlings Arrive By Plane

Four thousand seedlings arrived in Adelaide by plane today for the first experiments to determine whether rubber can be produced in South Australia.

Only a few weeks old, the seedlings were flown from Canberrra to avoid risking damage. They are now being placed in boxes at the Waite Agricultural Research Institute's nursery.

Ordinary horticultural attention will be given the seedlings in the nursery. They will then be transferred to country areas, where it is hoped they will thrive.

Test plots will be grown at Roseworthy Agricultural College, parts of the Mallee, and under irrigation at Barmera.

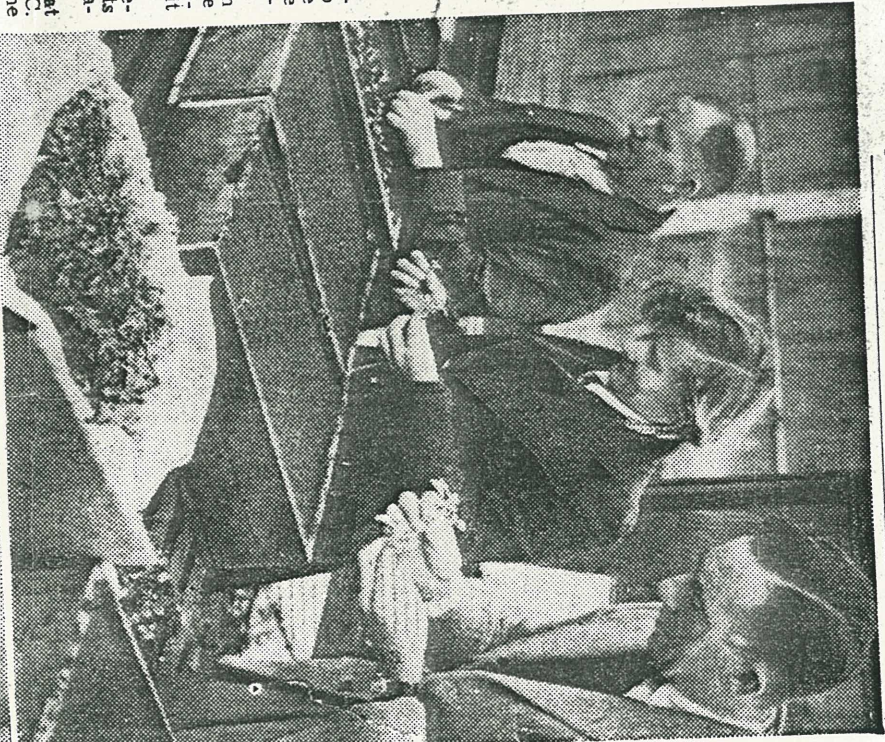
The professor of agronomy at the Institute (Professor H. C. Trumble) will have charge of the experiments.

MEXICAN PLANT

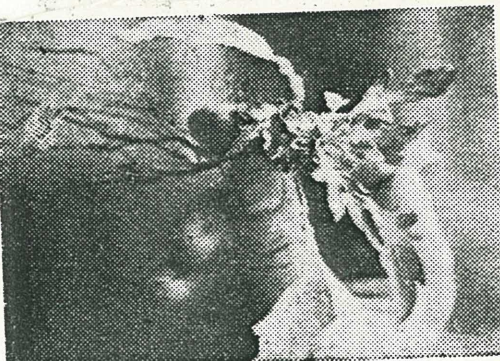
The seedlings are a species of the rubber-producing family known as guayule, a shrub-like native of Mexico. For several years guayule has been commercially grown in California, from where the seed was imported by the Council of Scientific and Industrial Research. Scientists believed that guayule would thrive better in South Australia than elsewhere in the Commonwealth, said the Director of the Waite Institute (Professor Prescott). The plant preferred a rainfall of less than 18 inches, and was a winter grower which needed a dry summer.

A Roseworthy was probably one of the best areas.

The News, Tuesday, July 21, 1942—3



SOUTH AUSTRALIA is going to try to grow rubber. Top picture shows guayule (pronounced WY-YOU-lee) plants, brought to Adelaide by plane from Canberrra today, being put into nursery boxes at the Waite Institute. They will be given a week's hardening, and then will be planted on Yorke Peninsula, and in River Murray districts. In the picture (left to right) are Mr. Ron Smith, Miss Dorothy Drew—who will tend the plants—and Dr. H. C. Trumble, professor of agronomy at the Institute. At the right is one of the plants. This will be the first time rubber-producing plants have been grown in South Australia.



BIG DRIVE FOR SCRAP RUBBER

"Every Ounce Needed Urgently"

MELBOURNE, July 17.

At least 15,000 tons of scrap rubber all over Australia was now awaiting salvage, the Minister for Supply (Mr. Beasley) said today. Australia needed every ounce of this scrap rubber urgently because it had a definite value in the nation's war effort.

Mr. Beasley added that every house had its precious stock pile of scrap rubber, and almost every article of reclaimed scrap could be used in our fighting machines. Cut off from her former sources of supply, Australia now had to dip into her rubber reserves. These reserves were not sufficient to meet all the demands of total war, and it was vitally important to supplement them with reclaimed scrap.

Municipal and shire councils throughout Australia had set up reception depots for scrap, he said, and the Boy Scout movement in all States would conduct a door-to-door drive on Saturday, July 25. Among the articles urgently needed were used tyres, tubes, sandshoes, hot water bags, golfshoes, rubber coats, gloves, mats, door stops, bathing caps, tubing, old garden hose, soles, heels, erasers, and rubber sponges.

PLANT EXPERIMENTS IN S.A.

Several Test Plots To Be Established

The Premier (Mr. Playford) announced yesterday that immediate steps would be taken to test the possibility of growing in South Australia plants for the production of rubber. He said that there would be 30 test plots in different parts of the State, including Yorke Peninsula, central districts, and the Murray Mallee, with some centres also in the Irrigation areas. The immediate objective was the planting of 1,000 acres.

Mr. Playford said that with the loss of the Dutch East Indies and Malaya the Axis Powers now held 90 p.c. of the world's natural rubber supplies, and it had become imperative to seek alternative sources. There were two main possibilities in Australia, either in the use of native rubber bearing plants, or in the cultivation of Guayule and the Russian dandelion, in Southern Australia.

"Guayule is regarded as second only to the rubber tree as a fruitful source of rubber, although economically it has never been able to compete," Mr. Playford said. "It is a native of Mexico, and has been cultivated in California since 1906, where 8,000 acres have been maintained. This is now being expanded to over 60,000 acres. It is capable of producing 100 lb. of rubber to the acre within one to two years."

Mr. Playford said that the Council of Scientific and Industrial Research had investigated the growing of rubber supplies in Australia, and it had been arranged that the work on Guayule in South Australia should be undertaken by the Waite Research Institute. Conditions in this State appeared to be more suitable for the cultivation of the plant than those in other parts of the Commonwealth.

The Guayule plant required light textured soil associated with limestone, and a good winter rainfall, but hot dry conditions in the summer. At present less than 1 lb. of seed was available, but 4,000 plants had been raised in a glass house at Canberrra, and would be forwarded within the next week or two by plane to Adelaide. The Waite Institute would co-operate with the State Departments of Agriculture and Lands, and the Roseworthy Agricultural College in testing the plant. It was hoped by the trials to obtain early information as to the centres where the plant could be grown successfully, and to establish commercial areas with seed due to be harvested in California this month. The plants were somewhat hard to germinate, and part of the experiment would be to determine whether it would be possible to raise seedlings under field conditions.

"The method of extracting rubber from the plant is entirely different from normal rubber production," said Mr. Playford. "The whole plant is collected and ground and a large quantity of water is used in the extraction processes."

Mr. Playford paid a tribute to the Waite Institute for the work being done. "I feel that many South Australians do not fully appreciate the wonderful asset we have in the Institute and its staff," he said.