Keeping Up With Philippine Forestry

By Felix O. Chinte

Study of some factors controlling germination of anabiong (Trema orientalis) *seeds.* By M. P. Lopez (1951) The study was conducted to find out the best method of propagating anabiong by seeds. Some of the results are as follows: (1) Seeds when sown must be protected from ants and rodents; commercial creasote was found effective for this purpose. Removal of the juicy pericarp by maceration minimized the action of ants and rodents on the seeds. (2) Stratifying the seeds in leaf-litter and keeping the mulch moist is a cheap but effective method of germinating the seeds; (3) The effect of temperature on germination, by soaking the seeds in water of different temperatures (38 degrees C. to 58 degrees C.) gave the best results both from the stand point of promptness and total germination percentage of survival which is 68 per cent and (5) Mortality was caused by the cricket (*Gryllus* sp.) and by damping-off fungus (*Rhizoctonia* sp.)

Hagakhak (Dipterocarpus warburgii) *and palosapis* (Anisoptera thurifera) *stands in the plantation.* By E. T. Tagudar (1915). Young stands of hagakhak and palosapis in the Makiling National Park were investigated. Some of the results are: (1) Young hagakhak trees in the plantation showed comparatively fast rate of growth, consequently five years difference in the age of trees will mean a significant difference in the sizes of trees. (2) Hagakhak trees grow faster than palosapis trees in the Makiling National Park plantation. (3) For every meter increase in crown spread there is a corresponding increase in clear length of 0.22 meter in the 12-year-old hagakhak trees, 1.44 meters in the 17-year-old hagakhak trees and 0.73 meter in the 16-year-old palosapis trees.

Preliminary study on root development of pang-lomboien (Zyzygium clausum) *seedlings.* By P. S. Narciso (1951). The effect of fertilizers on the growth and development of the root system of pang-lomboien was investigated. It was found that the response of the seedlings of the species was not consistent with the increase of the amount of fertilizer applied. Those seedlings treated with 232.2 grams of ammonium sulphate produced the tallest plants while those seedlings treated with 92.2 grams produced plants having the longest primary roots.

Preliminary study on root characteristics of narra (Pterocarpus indicus) *and supa* (Sindora supa) *seedlings in clay loam soil,* By D. A. Juni (1951). The study was conducted in the nursery of the Division of Forest Investigation with the aim of finding the relationship between the development of the root system and stem of the seedlings studied and the type of root system developed when grown in clay loam soil. Some of the results are: (1) Narra and supa seedlings, 1 to 120 days old, developed prominent tap roots. (2) Except for the youngest and oldest narra seedlings, the average tap roots were found shorter than the length of the stems. (3) The average length of tap roots of supa seedlings, 1 to 120 days old, is more or less equal the length of the stems and (4) The development of the root system of the two species studied was found greatest in 1-day old seedlings and decreased, thereafter, with the increase in age.

The possibility of coppice method of reproduction of anabiong (Trema orientalis). By J. E. Calip (1951). The study investigated the possibility of coppice system of reproduction of anabiong. It was found that out of the 250 stumps marked, 217 produced sprouts. Stumps of the 10- to 14-centimeter diameter class produced greater number of sprouts than the other sizes. The stumps falling under 10-, 20- and 30-centimeter height classes yielded good results as to the number of stumps that sprouted. The best results on survival was obtained from stumps falling under 30-centimeter height classes.

Phytopthora blight of ornamental palmera palms seedlings. By Roldan, E. F. & C. U. Luczon. (1951). The paper reports and describes a seedlings blight disease, a new local malady affecting seedlings of palmera palm, an introduced ornamental plant in the Philippines. The disease is reported for the first time. When noted it was in epidemic form causing a heavy infection of not less than 90 per cent of the seedlings in the nursery beds, resulting in heavy mortality of the seedlings. The causal agent of the disease has been definitely identified as a parasitic fungus of the species *Phytopthora palmivora* Butl. Control measures, which chiefly consist of eradication of parasites and protection of the seedlings, are suggested and described.

Bacterial wilt of teak seedlings. By E. F. Roldan & P. P. Andres (1951). The paper describes a wilt disease of teak seedlings in the Philippines caused by *Pseudomonas tectonae* sp. m. which has not been previously reported. A complete description of the disease is presented. The causal organism is a species of bacterium belonging to the genus *Pseudomonas* It is typically a vascular parasite. Morphological,

cultural and physiological studies of the bacterium showed that it is different from *Pseudomonas solanacearum,* a notorious vascular parasite causing wilt diseases of a great number of solanaceous plants. The name *Psuedomonas tectonae* sp. m. is suggested, at least provisionally, for the causal organism of this bacterial wilt teak seedlings. Suggested control measures for the disease are given and described in the paper.

Preliminary experiment on the impregnation of rattan pieces with chemicals to prevent fungal stains using the gravity method. By E. F. Roldan & J. R. Tadena (1951). The study deals with the prevention of stain in rattan. Stains or discolored blemishes developed on rattan are important because they cause the lowering of the grade of rattan thus radically affecting its value. The fungi found causing this discoloration are species of Ceratostomella; Melomastia; Helminthosporium; Cladosporium; Diplodia; and Curvolaria. The following chemicals were found to be effective in preventing growths of staining fungi if applied to freshly cut rattan and in proper strength: Lignasan, Dowideide G., Pentachlorophenol, Permatox 10-S, Copper sulphate and Acetic acid. Crysillic acid, Woodlife and Mercuric-bichloride, however, were found to have little effect on the suppression of the growth of the staining fungi.

Construction of an experimental dryer and artificial drying of rattan. By E. O. Mabesa (1951). The paper described the method of construction and use of an artificial dryer of rattan. The dryer costs ₱833.00 and has a capacity of 150 canes with an average diameter of one inch and 3 meters long each. It took 4 days to dry scraped rattan over 1 inch in diameter to 5.8 to 8.7 per cent moisture content.

A desirable temperature for drying to minimize collapse was found to be around 60°C at the start and gradually increased to 65°C when nearing the end of the period of drying. Scraped canes of limuran have a greater tendency to collapse whether matured or young than scraped palasan.

A study on the chemical treatment of rattan against insect attack. By A. D. Diasanta (1951). This investigation was conducted to determine the efficacy of some chemicals in protecting rattan from insect attack. The chemical used were pentachlorophenol (PCP), gamma benzene hexachloride (BHC) and dichlorodiphenyl-Trichloroethane (DDT) with kerosene as solvent. Two concentrations, 2 and 5 per cent by weight, of each chemical in kerosene was prepared.

The results showed that all the chemicals used in the tests were decidedly repellent to *Dinoderus* sp. with varying duration of effectivity depending upon the chemical, the concentrations used, and the treatment. Under adverse conditions where rattan canes are exposed to severe infestation of borers, it is highly probable that a 5 per cent solution of kerosene sprayed on the piles of rattan will prevent infestation by *Dinoderus* for a considerable length of time.

NOTES OF...

(*Continued from page* 15)

The measurement of the width of the crown can be accomplished by the use of any known micrometer wedge or any other instrument known for measuring horizontal distance. The determination of the density of growing stock can be made by actual count of the crowns of trees visible in the air photo. Because our forests have second and third story trees, use of density scale will facilitate density determination. The different gradations of the density scale which correspond to density classes will aid the interpreter to represent stocking of the particular forest covered in the survey.

It would be of advantage to the interpreter to have previous knowledge of the conditions of the forest before attempting to interpret the photograph. Therefore in order to be proficient, he must be well versed in the types existing in our rain forest.

Research in the correlation of variables for the determination of volume of stands must have forward stride so that we may have sufficient results for volumetric interpretation of photos. For the present time, I do believe that aerial photography will find its most important use in preliminary reconnaissance of the public forest. Hence, a combination of aerial photography and ordinary timber cruising may yield a highly desirable result from the standpoint of accuracy and economy.

REFERENCES:

1. Bagley, James W. "Aerophotography and aerosurveying." McGraw-Hill Book Company, Inc, New York and London, 1941.
2. Spurr, Stephen H. "Aerial Photography". pp. 183-194; Unasylva, Vol. II, No. 4.
3. Lecture notes taken in the class.