

Minutes of the Fourth Conference on
Forest Tree Breeding and Propagation
held at the National Research Laboratories, 10 a.m.
Saturday, Sept. 3, 1938 in Room 3095.

Present: Dr. R. Newton (chairman), Mr. J. L. Farrar,
Dr. H. H. Grace, Dr. L. P. V. Johnson,
Dr. F. H. Peto (secretary).

The minutes of the third conference were read and approved with the following changes:

Minute 27, para. 2, sentence 2, "seeds" to be changed to "seedlings".

Minute 30 to read: Mr. Farrar will be leaving in the Autumn to take graduate work and it was arranged that Dr. Grace and his assistants will carry out a limited program on the propagation of conifers during his absence.

**Nursery
men**

33. The Chairman stated that provision was made in the 1939-40 estimates for a laboratory and field assistant to Dr. Johnson. It was agreed that additional funds should be requested to permit the appointment to be made on February 1, 1939.

**Hormone
studies**

34. Mr. Farrar reported on the results of his experiments on the rooting of conifers with the aid of hormones. Valuable information has been gathered on factors influencing cutting survival, callusing and rooting but as yet no definite evidence of stimulation of rooting in conifers by means of hormones has been detected. More favorable results may be obtained from the late spring and summer applications to be examined in October. Further details will be found in current progress reports.

**Mr. Farrar's
graduate
studies**

35. Mr. Farrar outlined a tentative research programme to be carried out at Yale. It was designed to test the influence of (1) four dates of collection, (2) three sizes of cuttings, (3) sand, peat, and 50% of each as a medium, and six concentrations of hormone solution on Norway spruce. It was agreed that this should make a satisfactory programme which fits in well with our own projects but it was pointed out that such a programme might only yield negative results and that these might not give an entirely acceptable thesis. Certain studies on basic conditions influencing rooting on less difficult material might be used to supplement the above studies.

Plan
hormone
studies

36. Dr. Grace agreed to carry on a limited programme on the rooting of Norway and White spruce during Mr. Farrar's absence. He and an assistant will make the October observations at Petewawa and will treat monthly collections this winter and test a limited number of dusts and solutions on Norway and White spruce in the laboratories of the Division of Biology and Agriculture.

Rooting
of
poplars

37. Owing to the absence of Mr. Farrar and the heavy programme already undertaken by Dr. Grace, it was agreed that Dr. Johnson should be responsible for all tests on the natural rooting capacity of poplars and natural hybrids as well as conduct a limited preliminary experiment on the value of hormones in stimulating rooting in this material.

Recommend-
ations for
further
hormone
studies

38. The Secretary read a letter from Dr. Heimbürger which contained several suggestions regarding the programme for hormone studies to be carried out during the coming winter. These points were carefully considered by the meeting and the Secretary was instructed to reply to Dr. Heimbürger and indicate to what extent the suggested programme could be undertaken.

Reforest-
ation on
Ontario
Hydro
Commission
property

39. Dr. Johnson reported an interview with Hydro Commission officers who intimated their willingness to have any of their forest holdings used for test areas for hybrids or selected trees. The Chairman agreed to write Mr. Hogg to thank the Commission and state that we may have suitable material to test in about two years time.

Nursery
policy

40. Dr. Johnson reported on a visit to the nurseries at St. Williams, Orono and Midhurst. He described their elaborate and extensive nursery methods. He felt that our nursery accommodation and equipment as well as experience were scarcely adequate to grow valuable nursery material at present. Tentative arrangements were made to have this material grown at Orono. It was agreed that such an arrangement was satisfactory for the present.

J. P. Stans