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GENETICS IN SILVICULTURE



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PREFACE

FORESTERS the world over will be glad to have from the pen of such a prominent geneticist as Dr. C. Syrach Larsen a work which describes so ably and attractively the progress made in the past quarter of a century in the very important field in which he has been such a notable pioneer.

This book needs no commendation from me. I esteem it an honour to have been the first to have the opportunity to read it in English and sincerely hope that it has not suffered in the process of conversion.

It is a matter for regret that foresters have been so reluctant to accept the importance of genetics in forestry and that so much time has already been lost as a result. The appearance of this work is bound to stimulate an interest in tree-breeding, not only amongst foresters and forest-owners, but amongst all those who are in the least interested in the living tree.

MARK L. ANDERSON.

Edinburgh

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FOREWORD

It is awe-inspiring to see the tallest trees in the world—amongst the Californian sequoias—or to stand in the sample-plot, which Australian foresters have measured amongst *Eucalyptus regnans*, containing the tallest leaf-trees in the world. Both are impressive for their heights, which are a little over 325 feet and a little under respectively. Moreover, the great age of the former, which amounts to from 2000 to 3000 years, is a matter for wonder, while the latter are just as surprisingly young, being only from 200 to 300 years old.

It is just as impressive to make acquaintance with the still untouched forest of Western North America, with its large, beautifully shaped specimens of Douglas fir, red cedar, hemlock, and balsam, majestic because of their age. Unfortunately they are in process of a tragic and all too rapid decline. At the same time it must not be forgotten that the more uniform and much less romantic stands, of only some 80 to 100 years of age, which have arisen after forest fires, can be of still greater value to the timber trade.

In parks and forests in Scotland, England, and other parts of Europe—and, for that matter, wherever trees have been cultivated—it is encouraging to find isolated trees or small groups of trees with unusually fine growth. They strike one as being the splendid remnants of former natural stands, in which their imposing appearance has saved them from the axe, or they have been preserved as rarities, which have originated from the first seed obtained from plant collectors. Although they still remain part of the forest, we must bear in mind that they are past their most favourable economic age, and that greater benefit is obtained from the less attractive, but more uniform forest managed commercially.

Although one's mind is readily attracted by the largest, the oldest, and the finest, which have been given us by nature, one may also have sympathy for the starving people of the world and hope that mankind may be able to secure so much of peace that by co-operation it may be possible to build up rich resources to meet the needs of the individual community and of international trade.

Unfortunately it cannot be forgotten that in his progress and in his use of the riches of the earth man has not been good to the forest. To an overwhelming degree the forest has been an enemy, which has been fought by every means, or else it has been the object of the most intense exploitation by a crude process of "mining" with no concern for the future. Local timber shortages, and to an even greater extent erosion and other misfortunes, not