

**SOME FOREIGN TREES
FOR THE SOUTHERN
STATES. BULLETIN NO.11**

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Some Foreign Trees for the Southern States. Bulletin No.11 by B. E. Fernow

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BULLETIN No. 11.

U. S.-DEPARTMENT OF AGRICULTURE.—
DIVISION OF FORESTRY.

SOME FOREIGN TREES

FOR THE

SOUTHERN STATES.

PREPARED UNDER DIRECTION OF

E. E. FERNOW,

Chief of Division of Forestry.



WASHINGTON:
GOVERNMENT PRINTING OFFICE,

1895.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
DIVISION OF FORESTRY,
Washington, D. C., August 15, 1895.

SIR: I have the honor to submit herewith for publication a bulletin containing accounts of the value and method of cultivation of some exotic trees of economic value, which may be cultivated with advantage in some parts of the Southern States, with a view to the enrichment of the forest flora and to give rise to new and valuable industries.

Respectfully,

B. E. FERNOW,
Chief of Division of Forestry.

Hon. J. STERLING MORTON,
Secretary of Agriculture.

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INTRODUCTION.

This bulletin has been prepared with a view to calling attention to a few economic trees of the highest importance which are believed to be worthy of extended trial in the Gulf region of the Southern States and in California.

The cork oak offers a new industry to the South, and one which, properly fostered, will prove of no small value to the people. Experiments so far made, as a result of a distribution of seeds and plants of this species, show that the cork oak can be successfully grown over a large range of territory as far north as the thirty-third degree of latitude in Georgia.

The rapidly decreasing supply of tan bark makes the cultivation of any tree rich in tannin a subject of practical importance. The Australian wattle trees are among the richest in tannin. Their culture in California, begun under such favorable auspices a number of years ago, received a severe check, however, by the attack of the cottony cushion scale, one of the worst insect pests which has ever visited this country. The wattles were the favorite host plants of the scale, which spread thence to the citrus fruit trees, threatening the destruction of one of California's most important industries. With the advent of the parasite of this scale it is no longer feared, and it is hoped the culture of the wattle will be resumed and greatly enlarged.

The great variety in form, habit, and value of wood which the genus *Eucalyptus* offers makes it one of the greatest interest, not only to economic botanists, but to planters as well. The wonderful rapidity with which these trees develop suggests their usefulness, not only for wood supplies, but for shelter-belt planting. In California these trees are well established and grown for economic purposes. Although probably not many localities in the South are adapted to their cultivation, experiments are still needed to show the adaptability of some of the species, the large number of these with different habitats in their native country suggesting the possibility of adaptation.

The bamboo, a grass rather than a tree, but of such dimensions and character as to serve for the purposes for which trees are grown, has so far also been grown only or mainly for ornamental purposes. The incredibly rapid growth and the usefulness of the material for many

purposes, together with the ease of propagation when once established, suggest an extension of its use also for shelter planting in more southern latitudes.

While it is true that the natural forest resources of the South are rich and varied and by no means near exhaustion, the addition of these species of foreign origin, in special localities and under special conditions, will not be found devoid of interest and usefulness.

B. E. FERNOW.

WASHINGTON, D. C., *September 15, 1895.*

SOME FOREIGN TREES OF ECONOMIC VALUE ADAPTED TO PLANTING IN SOUTHERN STATES.

CORK OAK.

By Dr. J. D. JONES,

Formerly Assistant Chief of Division of Forestry.

Among the minor products of the forest, cork is one of the most widely used, though the area of its production is extremely limited. With the rapid development of the wine industry of California, the home production of cork has become a matter of increased importance. Attention has been attracted to the possibilities of cork growing in America by the rapid development of a few trees from acorns imported by the Department of Agriculture and planted in California in 1860. The following notes are based principally on a French publication—*Le Chêne-Liège, sa culture et son exploitation* par A. Laney, Paris, 1893:

HISTORY AND STATISTICS.

Among the more ancient writers, Theophrastus, 288 B. C., mentions cork, and the elder Pliny, 23-79 A. D., in his natural history (Liv. XVI, Chap. VIII), speaks of the tree, its growth, acorns, and the use made of its bark. The Greeks and Romans were familiar with many of the uses to which cork is put at the present time. They knew that the cork tree produced a new bark after the old had been detached, and they have recorded that in certain parts of northern Africa the natives used cork bark to cover their houses. Theophrastus mentions the cork oak of the Pyrenees, and all that Pliny says of it is true, except that the cork oak did not exist in Gaul.

The uses of cork were restricted, though knowledge of it had existed so long, until the seventeenth century, when the development of glass manufacture and the general use of bottles made it a necessity. At first only the native cork was used, and not until the eighteenth century do we find traces of the culture of the cork oak noted in Spain. Dr. Primitivo Artigas, professor of the School of Forestry at the Escorial, reports in 1760 a German—called by the people of the country Don Jose Bumez, director of the Royal Cannon Ball Foundry at San