

verse results of the East Indian experiments with *C. panamensis* may not apply to the whole genus. Moreover, during the present study of the subject many reasons have been found for believing that the conditions under which *Castilla* has been tested in the East Indies are not really favorable to the production of rubber; the current idea that a continuously humid climate is required is erroneous. In short, it appears that we are still at the beginning of a scientific comprehension of the factors which determine the practicability and profitability of rubber culture. It has been ascertained that rubber can be produced agriculturally, but where, how and what to plant, and how, how much and how long we shall harvest, are questions largely answered, as yet, by speculation rather than by experiment.

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THE NAME OF THE BREADFRUIT.

THE genus *Artocarpus* was first described in 1776 by G. and G. J. R. Forster in the 'Characteres Generum Plantarum,' a work written as a result of their botanical studies made during Captain Cook's second voyage into the Pacific and round the world between 1772 and 1775. The combination *Artocarpus communis* was given in this work for the breadfruit tree, a name which, according to nomenclatorial rules, must replace the generally accepted *Artocarpus incisa*, which was not published by the younger Linnæus until 1781.*

Forster's genus was, moreover, published as a monotype, and as his plants were from the Society Islands there can be no doubt but that he was dealing with the true breadfruit. He did not publish, it is true, any specific description, leaving all for the genus, but he did make a good binomial combination and had two good plates which are generally considered sufficient to establish a name in good standing.

Thunberg later in the same year (1776) published the names *Radermachia incisa* and *integrifolia* for the bread- and jak-fruits respectively from material collected in the

* 'Suppl.' 411. 1781.

East Indian Islands. Five years afterwards the younger Linnæus made his new nomenclatorial combinations on this material of Thunberg, adopting Forster's generic name and adding to it Thunberg's specific designations, and taking the credit to himself.

Further complications are met with when it is found that in the subsequent works of the Forsters, when mention is made of the breadfruit, the specific name *incisa* is used. Why they should abandon their own name is rather difficult to understand unless it was a case in which 'the king can do no wrong.'

Dr. A. Richter is fully alive to the injustice done Forster and has published a note* on the history of the name of the breadfruit which adequately states the facts in the case and further calls attention to the unfortunate revival by O. Kuntze of the pre-Linnæan name of *Soccus*, a relic of Rumphius, and of his combining with it Forster's specific name. Yet Rumphius published a specific name for the breadfruit which Kuntze has, for no apparent reason, seen fit to ignore.

A. Engler, acting on this note, has corrected in the 'Nachtrag' to the 'Natürlichen Pflanzenfamilien' the name of the breadfruit as it appears in the text of that work, and states that *Artocarpus communis* is the correct designation.

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EUCALYPTS IN THE PHILIPPINES.

THE eucalypts, of which but comparatively few species are familiarly known outside of their native home, include some one hundred and fifty species or more, nearly all restricted to Australia and Tasmania. Many of the forms may be classed as shrubs, others attain great size, surpassing in height, as has been stated on good authority, the giant Sequoias of California, though not equaling them in diameter or girth. A few species have been found elsewhere, viz., in New Britain, New Guinea and Timor, islands north of the Australian continent, between latitude 10° S., and the equator. It is not unlikely that sooner or later other species, at present unknown, will be detected on some of the multi-

* *Botanisches Centralblatt* 60: 169-170. 1894.

tude of islands, large and small, that occur between latitude 10° S., and 20° N. and longitude 90° to 170° E. From New Britain in the Bismarck archipelago midway between latitude 10° S. and the equator, to Mindanao, the most southern of the Philippines between latitude 5° and 10° N., situated to the northwest of New Britain, is quite a leap, as will be perceived by a moment's thought. The occurrence of *Eucalyptus* in the Philippine island above named has recently been verified by Mr. Maiden, the director of the Botanic Gardens, Sydney, N. S. W., who has examined the specimen collected by William Rich, the botanist of the U. S. ship *Relief* of the famous Wilkes* Exploring Expedition, who collected the plant or example, near Caldero, Mindanao, some time between 1838 and 1842, and named it *E. multiflora*; it proves, however, to be identical with *E. naudiniana* F. v. Müller.† Rich's name being preoccupied explains the change of name. *E. naudiniana* occurs in New Pommern (New Britain) 'and is so common in the forests that two saw-mills have been started especially for the timber, which is not hard as the Australian *Eucalyptus*, but still good useful timber.'‡

ROBT. E. C. STEARNS.

LOS ANGELES, CAL.,
August 15, 1903.

QUOTATIONS.

LORD SALISBURY AS A MAN OF SCIENCE.

It is generally understood that the branch of science which Lord Salisbury loved best was chemistry, and the freedom with which he discussed chemical questions gives weight to the suggestion. Besides, it is well known that he spent much time in his laboratory in Hatfield House, where, however, he directed

* *Proc. U. S. National Museum*, Vol. XXVI., p. 691.

† *Id.*, p. 692.

‡ As Mr. Maiden says: "There are so few *Eucalypti* found outside of Australia that the question of the identity of one found beyond the limits of that continent is of interest, and the occurrence of the genus in the Philippines is now set at rest, and doubtless its range in that group will be ascertained by American botanists."

his attention also to engineering and electrical problems. He conceived the idea of utilizing the flow of the River Lea for the electric lighting of the house, and the provision of a water supply to the town of Hatfield from the mains of Hatfield Park was due to his thought and kindness.

In many ways he showed that his love of science had practical as well as academic leanings, but he made no original communication on scientific subjects to the learned societies. He was elected to the fellowship of the Royal Society in 1869, and almost immediately became a member of the council. He took a keen and active interest in the internal affairs of the Royal Society, for he served on the council in 1882-3, and again in 1892-4. He was vice-president also in 1882-3, and in 1893-4. And almost his last public act was associated with science and not with politics, for on the occasion of the election of the Prince of Wales to the fellowship of the Royal Society in April last it was Lord Salisbury who introduced him to the president and fellows.

Lord Salisbury's character as a man of science deservedly secured for him the particular respect and admiration of our profession, though it must be confessed that he made no bid whatever for our favor. Lord Salisbury's name is not associated with a singular popular measure of the kind that would be sure to win medical approbation. But medical men could see in his attitude toward life the trained and austere thinker. He did not speak if he did not know; he would not proceed to the next step till he had verified the one on which progress should depend; and, having convinced himself in which direction truth lay, he would hold firmly to his convictions.—*The Lancet*.

CIVIL ENGINEERS OF THE NAVY.

THE civil engineers of the navy seem to have a substantial grievance. The service has grown and with it the duties of these dockyard officials. Our navy repair shops do an infinitely larger business than at any time since the war for the union. The civil engineer at Norfolk, for instance, has under his charge public works involving an expenditure of \$2,700,000, and is also responsible