Johnson has 40,000 hills of hemp on Lamidan, and land cleared for more. He has 2,000 coconut palms, and land cleared for 3,000 more. He is gradually changing over from hemp to coconuts, the latter paying better, one year with another. His plans are to plant the whole place in coconuts, which will mean 20,000 palms, an annual production of 4,000 production of 4,000 piculs of copra at the least, and a revenue of not less than \$10,000, \$20,000.

The labor available at Lamidan is that of wild tribes, of Bilanes and Manobos, who have the quaint custom of working well for the white man they like, and not at all, for anybody, if they don't fancy his ways. Whatever their own shortcomings, their employer must always be reliable, his word his bond. Johnson, like Pahl and other successful men, has been very fortunate in dealing with these people. It saves him the trouble and expense of bringing workmen from other provinces. The Bilanes and Manobos have their own little places nearby the boundaries of Lamidan, and come at Johnson's bidding to do whatever there is to be done. He pays them cash, they spend their wagges in his store, and both are happy. Hemp stripping is remunerated on the basis of the weight and grade of dry fiber. Men, women and children employed at other work receive from 30 centavos to a peso a day, fifteen to fifty cents, according to what they are ableto do. A native foreman gets P1.50 a day, reventy-five cents. The men are expert at clearing off jungle to prepare fields for planting. They fell the small growth, vines, rattans, etc., with their bolos: then they back down the scrub trees and set a fire going. Only charred stumps remain to hinder the plow. Within a year the white ants have removed these, and the fields, already planted to productive crops, are as clean as prairie lands.

Enjoying prosperity, the creator of Lamidan has been touched by the wanderlust. He comes to Manila often. He came to town in 1908, again in 1918, and is up here again this year—with the excuse that he ought to have some dental work done. That is to say, one doesn't just wish for a Davao plantation and come into possession of it. He stays with the job of creating it, for ten years at a time. It is not so much the moncy invested that makes for success; it's the man on the job, the fellow who delights in pushing jungle borders back from fertile shores and making himself master of the wilderness.

# The Coffee Industry in the Philippines Its Decline And Its Partial Recovery

By Pedro A. David

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The Philippines once had the reputation of producing some of the finest and highest priced coffee in the world, which was noted for its superior quality and compared favorably with the best Mocha.

The coffee tree is not a native of the Philippines. It is said that the Spanish missions ries introduced it into the Philippines during the latter part of the eighteenth century. Its systematic cultivation did not begin until he earlier part of the nineteenth century. From this time until 1891, coffee was an important crop and constituted a source of considerable wealth in the Philippines, notably in Laguna, Batangas and Cavite provinces. The highest grades were grown in Batangas.

Official records of the Philippine government show that coffee was an important export of the islands from 1854 to 1894 as represented on the accompanying graph. In 1854 there were P137,221 worth of coffee exported from the Philippines. It constituted 2.16 per cent of the total value of exports. In 1889, the value of the export was f2,474,210, calculated to be 7.08 per cent of the total value of exports from the Philippines. After this date, the figures rapidly fell until 1894, when the export trade had been completely wiped out and at the present time the Philippines are importing coffee for home consumption. According to the official records of the bureau of commerce and industry, the importation of coffee for 1922 and 1923 was P2,181,187.

The rapid decline in the coffee industry of the Philippines was due to the sudden appearance and spread of a devastating disease, coffee blight, or rust, and is caused by a fungus known to science as Hemileia vastratric. This disease was a complete mystery to the Filipino farmers. The fungus covers the lower side of the leaves of coffee with yellow powdery spots containing spores and causes the leaves to fall. The cumulative effect of defoliation goes on for nine months in the year. The disease spreads from an infected plant to a healthy one by means of spores and is more severe during the rainy season. The mycelium penetrates through the stomata of the leaves and grows in the intercellular spaces of the leaf tissue, not only robbing the leaves of the manufactured feod of the plant but also destroying these organs upon which the life of the plant is dependent.

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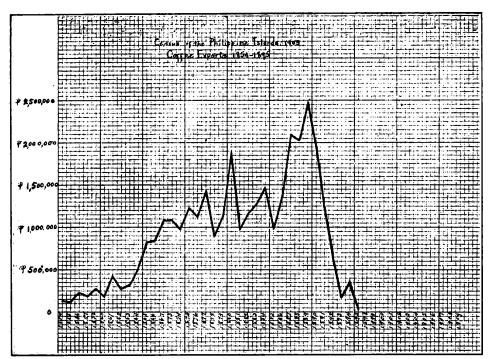


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Ignorance concerning plant diseases and their control and the complete absence of effective quarantine measures regulating the importation of plants in the Philippines, at the time of the introduction of the disease, account for losses of the Filipino coffee growers running into many millions of pesos. But the Filipinos were not the only victims of the voracious parasite. The Dutch possession were equally unfortunate and their export figures from 1883 to 1908 show a steady decline from 60,000 tons to less than 20,000 tons.

The industry in Java was rehabilitated by the cooperation of the Dutch government with the planters. The measures taken were of three different kinds: (a) search for a rust-resistant coffee, (b) breeding resistant varieties, which is now considered a very promising measure, (c) securing information as to the best method of culture. As a result of vigorous efforts along these lines, the Dutch people were able to restore their coffee industry from ruin in spite of the presence of the parasite.

The first effort made by the Dutch was duplicated in the Philippines by Dean C. F. Baker of the College of Agriculture, and C. C. Batchelder and P. J. Wester, formerly of the bureau of agriculture, by introducing into the Philippines in 1912 to 1916 some of the rust-resistant varieties such as Liberica, Excelsa, Robusta, Ugandae, Quillou, Cogonsis, Abeokutae etc. from Buitenzorg, Java.

In order properly to evaluate the success already attained in the rehabilitation of the Philippine coffee industry as a result of the efforts of these men, it will be instructive to examine the government records. Practically no mention of coffee production is made in official publications for the period from 1895 to 1911. After the year 1912 production again began to increase and mounted from less than P70,000 in value to over P1,000,000 in a period of ten years as shown by the accompanying graph. These records are taken from the report of the bureau of commerce and industry. The area planted to coffee is on the increase every year but has not yet

become sufficient to supply the demand for domestic consumption.

Many parts of the Philippines present the most perfect natural conditions as to climate and soil for coffee cultivation. Some of the special inducements for the cultivation of coffee are the vast areas of virgin soils, most excellent locations, and ready markets. The total area of the Philippines is 29,629,600 hectares, of which 63.6 per cent is forest land 18.7 per cent is grass and open land. A very large part of both the forest and the grass lands is suitable for coffee cultivation.

Mindanao lies in the same latitude as Liberia, Abyssinia, Dutch Guiana and Colombia, which are considered world important coffee producers. Mindanao and Java, Zanzibar, New Guinea and Brazil are at about the same distance from the equator. Is there any valid reason why Mindanao can not be equally as good a producer as these countries in the same latitude? There is no question that with improved practices and better understanding of the requirements of coffee, many localities in the archipelago which are now producing very little or nothing can be made to pay a good profit when planted up with the introduced coffee varieties.



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