

## Cinnamon Cultivation In the Island of Ceylon

**C**EYLON is a very important world source of cinnamon oils and aromatic cinnamon chips. Although this spice industry has been important for many centuries, the local production of by-product essential oils in substantial quantities has developed only since the World War. In view of the close relationship between cinnamon cultivation and oil distillation planting trends, market conditions, and export trade during the past decade are herewith presented.

*Cinnamon Tree Cultivation in Ceylon.*—Cinnamon grows wild in Ceylon as a tree, attaining in the forest areas a height of 30 to 45 feet. On plantations, trees—most of which are varieties of *Cinnamomum zeylanicum*—are regularly pruned to encourage lateral branching close to the ground and therefore resemble bushes which seldom exceed ten feet in height. Ceylon cinnamon products of commerce are obtained almost exclusively from cultivated trees. Of the present plantation area devoted to this crop, aggregating about 26,000 acres, over 15,000 acres are located in the Southern Province districts of Galle and Matara and about 9,000 acres

in the vicinity of Negombo on the east coast. Cultivation is almost entirely in the hands of native plantation owners. Although there are a few estates aggregating over 200 acres and a considerable number of 100 to 150 acres each, the majority are small 20 to 50 acre tracts.

*Cinnamon Quills and Chips.*—The cinnamon spice of commerce is obtained from the bark of the trees. Cutting of the trees generally takes place between May and October. It is not generally considered advisable to cut shoots or bark from the trees until after their fourth year of growth.

The branches and cut sticks collected are trimmed of foliage and shoots and the bark carefully peeled off. This new cut bark is collected into bundles and left to ferment for several days, after which the pulpy matter inside the bark is scraped out and the coarse outer bark trimmed off. The cinnamon pipes of quills are then cut in 12-inch lengths, bound together and removed to estate sheds or transported to export trading establishments for grading and packing. Grading is customarily based upon

**Distribution of Cinnamon Leaf Oil Exports to Leading World Markets During Last Decade**

Year	United States Pounds	United Kingdom Pounds	Strait Settlement Pounds	Japan Pounds	Other Countries Pounds
1922.....	2,187	24,700	4,005	1,100	2,369
1923.....	38,916	10,920	3,477	17,125	7,339
1924.....	71,069	13,311	7,170	1,598	2,905
1925.....	95,787	17,403	5,748	2,152	6,953
1926.....	79,843	6,860	9,966	1,732	1,842
1927.....	25,141	10,715	9,548	.....	1,408
1928.....	10,380	12,232	11,685	1,186	914
1929.....	12,884	15,362	9,182	606	1,003
1930.....	54,448	13,251	13,083	3,135	4,744
1931.....	81,008	21,023	11,390	9,079	6,210

The United States has been the leading purchaser of Ceylon cinnamon leaf oil, the value of such imports being as follows:

1923.....	\$ 41,571	1926.....	\$95,517	1929.....	\$16,417
1924.....	83,186	1927.....	27,719	1930.....	65,811
1925.....	120,949	1928.....	11,323	1931.....	93,321

the color and texture of the quills. Cinnamon chips are small cuttings from fragments of bark left over in the preparation of the quills.

*Trends in Cinnamon—Production and Trade.*—Acreage devoted to cinnamon declined materially during the war and early post-war years. A considerable area in the Negombo district was cut down in order to plant rubber and coconuts, which afforded greater profits from exports than did cinnamon during that period. With adverse conditions prevailing for the spice crop itself, greater attention was given to the development of aromatic oil by products, and a fairly substantial trade in cinnamon bark and leaf oils were developed during the years 1922 to 1927. Cinnamon prices began to rise in 1924 and more intensive cultivation of cinnamon plantations and extension of acreage in the Southern Province resulted. Oil distillation slackened during 1928 and 1929 as a result of the good spice market but increased markedly during 1930 and 1931 when cinnamon prices again declined. These trends are illustrated in the table below which presents comparative statistics of cinnamon quill, chip, and cinnamon oil exports.

*Cinnamon Oils Production and Trade.*—Cinnamon bark oil exported from Ceylon is obtained mainly from broken quills and cinnamon chips. Steam distillation methods of a rather primitive character are employed. Bark oil production is concentrated mainly in the Galle district where 19 cinnamon distilleries are in operation. Formerly cinnamon leaves were distilled along with the chips of leaf oil added after distillation but in recent years a distinct market for the latter and a demand for very high grade bark oil has largely done away with this practice. Export trade in cinnamon bark oil has fluctuated considerably and although a very low year was recorded in 1930, a substantial recovery in overseas demand was evidenced in 1931.

Cinnamon leaf oil came into prominence in Ceylon export trade during the period 1921 to 1924. Its high eugenol content created a substantial foreign demand for the oil in competition with clove oils. However, the use of the leaves long employed as a natural fertilizer for the cinnamon plants resulted in curtailment of quill yields and when the spice market was ac-

Year	Cinnamon	Cinnamon	Cinnamon Bark Oil		Cinnamon Leaf Oil	
	Quills	Chips	Pounds	Value	Pounds	Value
	Pounds	Pounds				
1922.....	3,516,912	1,296,175	11,906	\$17,448	34,361	\$ 34,957
1923.....	3,649,750	1,388,465	45,385	51,862	77,777	63,149
1924.....	3,869,000	1,448,945	50,847	60,524	96,053	118,880
1925.....	3,384,650	1,349,230	11,800	25,063	128,043	165,944
1926.....	3,498,660	1,329,890	14,713	19,027	100,243	124,730
1927.....	3,505,715	1,244,770	11,796	34,031	46,812	54,641
1928.....	3,886,290	1,234,575	9,747	13,972	36,397	43,392
1929.....	4,150,610	1,249,695	11,317	16,387	39,037	49,742
1930.....	4,022,480	922,208	3,468	10,704	88,661	107,668
1931.....	3,949,230	7,748,160	12,125	.....	128,710	136,400

Cinnamon quills are shipped principally to the United States, Mexico, and Spain with smaller quantities destined mainly to Germany, Italy, and the Netherlands. Cinnamon chips which are frequently employed for the distillation of cinnamon bark oil in foreign industrial centers are marketed principally in Great Britain and Australia, with smaller substantial shipments going to the Netherlands, Belgium, France, Germany, Argentina, and Italy.

and cinnamon prices were good during 1927, 1928, and 1929, smaller quantities of the leaves were employed for oil production. However, a marked increase in output and overseas demand was apparent in 1930 and 1931.

Increases and decreases in the volume of this Ceylon trade follow very closely the American demand. Shipments to nearly all important markets have shown substantial gains since 1929.