

LABORATORY
OF THE
INLAND REVENUE DEPARTMENT
OTTAWA, CANADA.

BULLETIN No. 201

Flavouring Extract of Vanilla.

OTTAWA, March, 1910.

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Deputy Minister of Inland Revenue.

SIR,—I have the honour to hand you a report dealing with 77 samples, purchased throughout Canada, as Flavouring Extract of Vanilla, in December last.

The last examination of this article was reported in Bulletin No. 89 (Sept. 1903). That report showed, in 21 samples, the following variations of character:—

Vanillin.	varies in amount from	0.012	to	0.268
Coumarin	"	0.016	"	0.160
Alcohol	"	5.470	"	50.470
Sugar	"	0.600	"	25.000

The present inspection (77 samples) indicates still greater variation:—

Vanillin varies in amount from	0.000	to	1.419
Coumarin	"	"	0.186
Alcohol	"	"	1.300
			52.800

The question, 'What is wanted, or expected, when a purchaser demands Extract of Vanilla?' seems pertinent.

The dried, fermented pod of *Vanilla Planifolia*, is an article of export from the West Indian Islands, Mexico, and some other localities. The extract of Vanilla is undoubtedly supposed to be prepared from this pod, by maceration in alcohol, with or without the addition of sugar and glycerin. The United States defines Extract of Vanilla thus:—'Vanilla Extract is the flavouring extract prepared from the dried, cured fruit of *Vanilla Planifolia*, with or without sugar or glycerin, and contains in 100 cubic centimetres, the soluble matters from not less than 10 grammes of the Vanilla bean.'

The extractive matters referred to are, a crystallin substance known as *Vanillin*, and certain resins; and the characteristic flavour of genuine vanilla is due to the combined flavours of these extractives. Undoubtedly the vanillin contributes chiefly to this total flavour; but that it does not entirely account for it is manifest when we consider that the most highly valued beans are not those which yield the highest percentage of vanillin. Thus Tiemann and Hermann (1) found as follows:—

Mexican beans.	1.69	p.c.	Vanillin
Bourbon "	2.48	"	"
Java "	2.75	"	"

Vanillin manufactured from Eugenol (and other sources) is an article of commerce, and is chemically identical with the vanillin from the bean. It is, however, quite evident that a solution of manufactured (Synthetic) vanillin, cannot be regarded as identical.

(1) Leach—Food Analysis, &c., p. 730,

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