

A Note on the Variable Tannin Content of the Wood of the Kumaon Oak (*Quercus incana*).

By

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We became interested in the tannin content of the wood of the Kumaon oak when we found that the bark alone is not available in sufficiently large quantities to make a commercial proposition of the manufacture of tannin extract from that material.

Pilgrim (*Indian Tanstuffs*, 1920) found 4.91 per cent. tannin, 4.27 per cent. soluble non-tannins in a sample of the wood supplied by the Inspector General of Forests, Simla. In a preliminary examination of a small sample supplied by Mr. Gill, from Ramgarh, near Nainital, we found about 3 per cent. tannin and 2 per cent. non-tannin, and colour about 3.3 times as dark as decolourised French chestnut extracts. We then obtained about 20 maunds of the wood through the Divisional Forest Officer, Nainital. This was supplied from Bhowali (near Nainital) in March and on analysis gave only 0.8 per cent. tannin, 3.7 per cent. soluble non-tannins and 20.2 yellow, 14.0 red (colour in 1 cm. tube for 0.5 per cent. tannin content).

One of us paid a visit to the Nainital district in November and selected samples, from Bhowali and

Ramgarh, of young and old trees, main stems and branches : these on analysis gave the following results:—

Sample.	Moisture.	Tannin.	Soluble non-tannin.	Colour.	
				Yellow.	Red.
Young stem (Ramgarh)	9.1	3.6	3.9	10.5	7.0
Young stem (Bhowali)	9.6	1.9	4.2	7.1	5.2
Mature stem (Ramgarh)	16.6	3.3	2.7	8.6	6.4
Mature stem (Bhowali)	8.6	3.6	5.7	14.6	8.7
Mature branches (Ramgarh)	7.1	4.2	3.9	10.7	6.5
Mature branches (Bhowali)	10.4	3.5	5.6	12.1	7.1
Young branches (Ramgarh)	8.6	3.8	2.4	10.9	5.9
Young branches (Bhowali)	9.1	3.2	4.1	8.4	5.0

A consignment of 1 ton was then ordered from the Forest Ranger, Bhowali, who had supplied the previous consignment and had helped us in getting samples in November. He supplied wood from the main stem and branches of old trees from Ramgarh and to our great disappointment this on analysis gave

	Total soluble matter.	Tannin.	Soluble non-tannin.	Colour.	
				Yellow.	Red.
(a)	3.7	1.5	2.2	28.3	15.7
(b)	4.2	1.7	2.5	30.4	18.0

This consignment was supplied in August.

Evidently the percentage of tannin in the wood varies in a most capricious manner and considering that the tannin is always on the low side, the wood does not seem worth further consideration as a source of tannin extract.