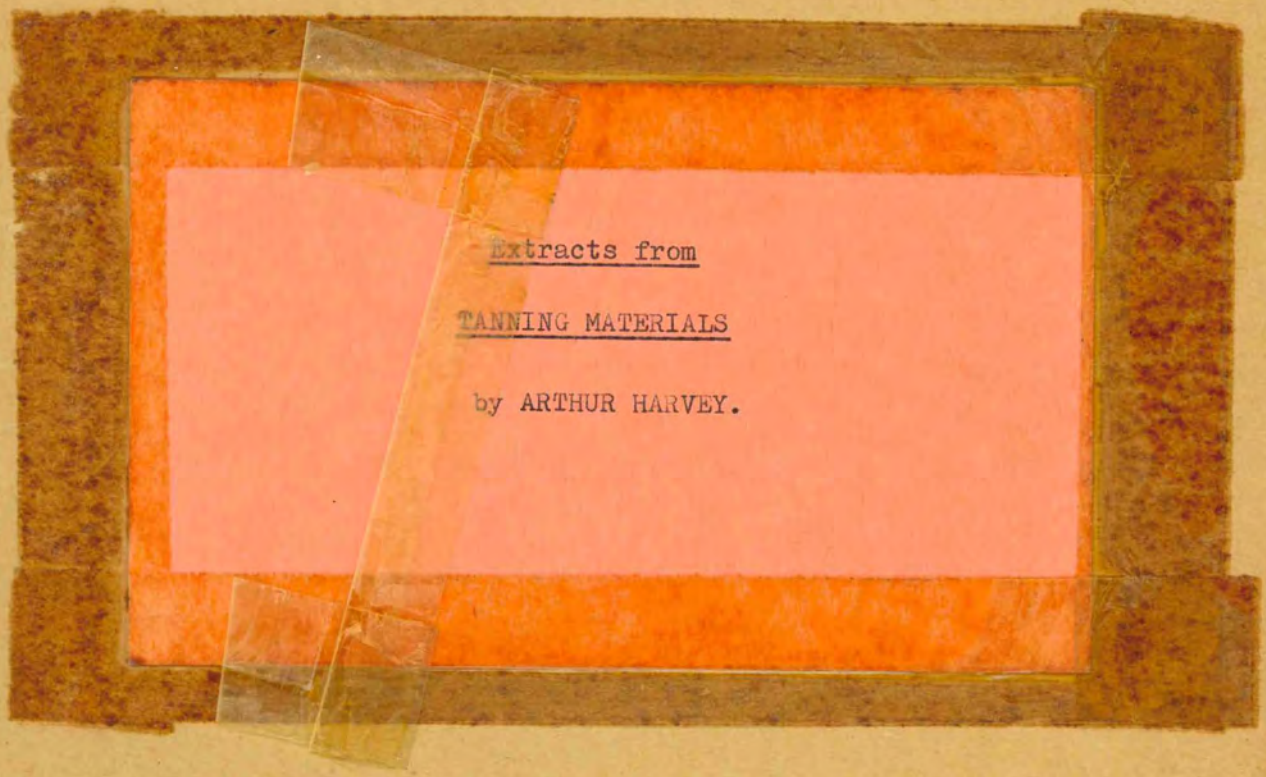

Extracts from

TANNING MATERIALS

by ARTHUR HARVEY.

EXTRACT FROM "TANNING MATERIALS" BY
ARTHUR HARVEY

Pages 24-25.

Eucalyptus Species (Various).

See also Kino (p. 40) and Mallet (p. 42).

The composition of some little-known eucalyptus species are given below, the figures being by Maiden of New South Wales plants :-

Botanical Name	Local Name	Bark Tannin	Dry Leaves
		per cent.	per cent.
E. stellulata	Black gum or black sally	12.86	16.62
E. sieberiana	Cabbage gum	36.96	2.39
E. siderophloia	Red iron bark	10.4	5.95
E. amygdalina	Ribbon gum	...	1.81
E. piperita	Messmate	...	12.59
E. viminalis	Manna gum	7.5	4.0
E. Stuartiana	Apple tree	5.25	10.16
E. corymbosa	Bloodwood	5.85	18.37
E. maculata	Spotted gum	9.74	5.26
E. Gunnii	Red gum	11.35	16.50
E. robusta	Mahogany	...	12.07
E. odorata	White box	...	6.77
E. obliqua	Stringy bark	17.2	...

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Kino.

Kino is the general name given to the gummy exudations found on the barks of certain trees. Although very rich in tannin, the kinos are not used for tanning, except, perhaps, in isolated cases. In the first place the quantity available is not at all large. Their chief application is in medicine. Some early analyses by Maiden of kinos from New South Wales trees are given below :-

	Tannin Per Cent.
Eucalyptus maculata (spotted gum)	44.55
E. amygdalina (ribbon gum)	57.76
E. siderophlora (red iron bark)	35.18
E. corymbosa (bloodwood)	28.44
E. macrorrhyncha	54.12
E. piperita (messmate)	62.12

So far, the kinos have been found to contain catechol tannins.

Some later and more complete analyses are those by F.A. Blockey, J.S.C.I., 1902, and are given below for reference :-

	Local Name	From	Tannin	Sol. Non-Tan.	Insol.	Water
			Per Cent.	Per Cent.	Per Cent.	Per Cent.
Eucalyptus siderophlora	"Iron bark" kino	Cambevarra, N.S.W.	73.2	4.0	6.4	16.4
E. amygdalina	"Ribbon gum" kino	N.S.W.	64.8	7.2	10.9	17.1
E. piperita	Kino	"	31.5	5.6	46.0	16.9
E. corymbosa	"Bloodwood" kino	"	30.3	2.7	54.3	12.7
E. punctata	"Grey gum" kino	"	38.3	5.0	42.9	13.8
E. stilluta	Kino	"	31.6	9.4	42.9	16.1

A gum kino known as Malabar kino - the dried exudation from Pterocarpus marsupium - is stated by Hooper to have the following composition :-

	Per Cent.
Moisture	12.2-15.7
Tannin	70.0-82.4
Insoluble matter	0-5.1
Ash	1-2.3

One hundred c.c. of the fresh kino yields about 50 gm. of the dry gum.

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Mallet Bark (Eucalyptus occidentalis).

This Australian tan bark is one of the richest barks available, and its rapid gain in popularity is shown by the fact that the value exported in 1905 was £154,087, as compared with £859 for 1903. The Germans were large buyers of the material for the manufacture of extract.

It gives a firm light brown coloured leather devoid of the pinkish tinge common to mimosa tanned skins.

Its composition is :-

	Per Cent.
Tannin	42.0
Soluble non-tannins	8.0
Insoluble matter	35.5
Moisture	14.5
	100.0

While another analysis by Paessler gave :-

Tannin	39.1
Soluble non-tannins	11.9
Insoluble matter	34.5
Moisture	14.5
	100.0
Glucose	1.4
Cane sugar	0.8

Dekker has experimented with a mallet bark which had the composition :-

	Per Cent.
Tannin	31.7
Insoluble matter	35.7
Moisture	13.4
Mineral matter	5.74
Nitrogenous matter	0.44
Carbohydrates	19.17
Pentosans	8.10

The tannin belongs to the catechol group.
