use soft water for dyeing. Rain water is best of all.

As with mordanting, the wool must enter the dye damp. Keep it well covered with liquor and stir it gently from time to time, but not enough to cause felting. The wool is lifted and stirred by means of the wooden sticks, but care must be taken that dye which has soaked into these does not come out again and spoil some light wool with dark stains. That is why glass rods, such as those sold for towel rails, are so much better. They do not absorb the dye. Prolonged boiling will spoil some shades, e.g., reds and yellows.

After dyeing rinse well in running water and dry. Of course when dry the final shade will be lighter than it appears when the wool is wet.

## Materials to Use

A great many vegetable substances will dye wool, and a few others such as cochineal, which, while not of vegetable origin, comes under the heading of a natural dye, being made from minute insects. I cannot do better than quote a very useful little table put out by the W.E.A. under one of their box lecture schemes at Massey College, which gives a useful summary of the more common sources of material and the mordant to use with each, but I would emphasise again that natural dyes in most instances will not produce very brilliant colours, but rather pleasing soft, warm tones.

Acknowledgments

I wish to thank Miss L. Harper and Mrs. P. R. McMahon for helpful suggestions and criticisms during the preparation of this article.

Useful Books

"Complete Guide to Hand Spinning," by K. Grasett. Published by the London School of Weaving, 13 Bryanston Street, Marble Arch, London, W.1. Price 2s. 6d.

"Scouring and Dyeing," by K. Grasett. Same publishers and price as above.

"The Use of Vegetable Dyes for Beginners," by Violetta Thurston. Published by the Dryad Press, Leicester, England.

"Spinning Wool," Dryad Leaflet No. 83. By the same publishers as the above.

All photographs and illustrations by the author.

## **Table for Using Mordants**

Colour.			Source. Mordant.
Black (b	lue)	44.	Maire bark (Eugenia maire) Alum
			Hinau bark Alum Mako Mako (Aristotalia racemosa) Alum
144			Mako Mako (Aristotalia racemosa) Alum
			Dock root
Blue			Blackberry shoots Iron sulphate Indigo
Blue		0.4	Indigo Alum
			Privet berries Bichromate of potash
Blue (gr Blue (lil:	ey)	**	Blackberries, privet berries Iron sulphate
Blue (lila	ac)	9.4	Elderberries Alum and sait
BLICK			Coprosma grandiflora Bichromate of notash
Brown (	yellow	ush)	Lichen None required
Brown			Walnuts (green) Alum
**			Manuka bark Alum Rimu bark Alum Bracken tips Bichromate of potash Tanekaha bark (celery-leaved pine) Alum
**			Rimu bark Alum
n /			Bracken tips Bichromate of potash
Brown (	red)		Tanekaha bark (celery-leaved pine) Alum
Brown (t	an)		Flax (root and base of leaves) Alum
Brown	**	**	Bluegum bark Alum
a			Wattle bark Alum Rock lichen Alum Walnut husks Alum Coal soot Alum
Crimson			Rock lichen Alum
Crimson Grey		***	Walnut husks Alum
			Coal soot Alum
Grey (wa Green	arm)	4.4	Lichen No mordant
Green	**		Lichen No mordant
**			Moss (birch) Alum
**			Elder leaves Alum
111			Bidi-bidi Alum
141			Lichen No mordant Lichen No mordant Lichen No mordant Lichen No mordant Moss (birch) Alum Elder leaves Alum Bidi-bidi Alum Spiñach Alum Sorrel Alum Ivy leaves Alum Gum leaves Alum Dandelion Bichromate of potash Sundew Coprosma robusta (karamu)
			Sorrel Alum
			Ivy leaves Alum
Magenta			Gum leaves Alum
Magenta			Dandelion Bichromate of potash
Old gold			Coprosma robusta (karamu) Alum
Orange			Coprosma robusta (karamu) Alum
**			Onion skins
			French marigolds Bichromate of potash Wallflowers Bichromate of potash
Pink (fav	(m)		
Pink			Peach leaves Alum Coprosma (areolata) Stannous chloride and cream o
Petunia			Coprosma (areolata) Stannous chloride and cream o
. country	***		tartar
Red	200		Cochineal Alum, pepper and cream of tarta
.,			Cochineal
			Sorrel (roots)
Purple Violet			Wild cress
Violet			Wild cross Alum
			Lichen Alum
Wine		14	Passion-fruit skins
Yellow			Dock leaves Alum
			Heather No mordant
			Reseda Luteola (wild mignonette) Alum
			Barberry bark Alum
			Mulberry bark (fustic) Alum
			Bracken roots Alum
			Lichen (tree and fence) No mordant
			Reseda Luteola (wild mignonette) Barberry bark
2.2			Wallflower Alum and ammonia
			Fennel Alum
Khaki			Walnut husk and gum leaves Alum
			Broom twigs Alum



State forests are a big item of our national wealth. Wood is a natural building material in N.Z. Yet Borer and decay threaten all timber homes. The solution is to have all timber dipped in Pentachlorophenol before building. Boracure are developing this treatment and also offer a House Maintenance Service which will watch your property and prevent decay starting. Get full details.

BORACURE (N.Z.) LTD.

217 Lambton Quay, Wellington. 'Phone 40-050.

## 'INERTOL' BLACK PAINT

FOR IRON-ROOFING, FELT-ROOFING, BRICKWORK, CONCRETE, or WOOD. WATERPROOFS and PRESERVES and EASY TO APPLY

CHEAPEST AND BEST

Made in New Zealand by-

## RESTAR

(South Island) LTD.,

14 Bedford Row, CHRISTCHURCH.