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Subject: "FABRIC TESTS." Information from the Bureau of Home Economics, U. S. Department of Agriculture. Publication available, Farmers' Bulletin 1831-F.

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A <u>brand new</u> bulletin from the Bureau of Home Economics, right at the start of the <u>New Year</u> is <u>big news</u> for homemakers. "Judging Fabric Quality" is the title of this bulletin, and Farmers! Bulletin 1831-F is the number for ordering it. The author is Bess Vienont Morrison, who knows her fabrics, whether they're for curtains, slip covers, or upholstery.

Many of you will want to own this bulletin as soon as possible, what with white sales this month and spring sewing just around the corner. But while you're waiting for the information in printed form, perhaps you would like to hear some of the ways you can test fabrics yourself to find out what fibers they contain. The chief testing equipment you need consists of a candle and a box of matches for burning tests; a washtub or basin for laundering tests; and possible a chemical or two which I'll mention later.

Many fabrics are made wholly of one kind of fiber,—all cotton, all wool, or pure silk. But it is common to find fabrics that are blends of 2 or 3 or even more fibers. Then again, a great number of synthetics are woven to look like fabrics from the natural fibers. And many finishes and treatments are given to both yarns and fabrics, so you can't be sure what they really are, without a test of some sort.

Some manufacturers label yard goods to show what the fibers are. Others give only unsatisfactory information. You can do a little testing if you take some samples home.

To find out whether the sample is an untreated, all-ootton material, try the

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burning test. Tough a lighted match or candle to the sample. It should burn quickly with a yellow flame that flashes along and is difficult to put out. The burning cloth gives off an odor of burning paper, burns almost completely, and leaves practically no ash. Mercerized cotton burns a little less rapidly than the untreated material and leaves a small amount of black ash.

It's a good idea while you are at it to test other samples of the same lot for colorfastness, both in the light and in washing. Most cottons are laundered at some time or other. And strong sunlight often fades summer dresses and draperies. So you might wash some of the samples, and expose others to sunshine for several days. The chief drawback to such home tests is that all the material you liked may be sold by the time the tests are completed.

It's almost impossible for the average person to distinguish between cotton and linen fibers, as microscopic tests are necessary. You can sometimes tell if a material has been treated to make it crush resistant. Crumple some of it in your hand and see if it will spring back to its original smoothness.

Silks are either pure-dye or weighted, according to the kind and amount of finishing materials they contain. Most pure-dye silks have a slippery smoothness. They are soft and pliable, and usually have a natural luster. The surface of the fabric has no fuzzy ends, and so does not soil readily. Heavily weighted silks are crisp and have a crunch when clasped in the hand. They fool the uninformed buyer because they have more body than pure-dye silks, but they are less elastic and pliable, wrinkle badly, cut and split easily.

It's easy to tell by the burning test whether or not a sample of silk is pure-dye or weighted. Pure-dye silks burn readily with a small blue flame, which is easily put out. The odor is pungent, like burning feathers. The ash is black and shiny, and forms in tiny, brittle balls along the edge of the fabric. Weighted silk chars instead of burning, and leaves a black ash of the same shape as the piece of cloth.

. . . . . . .  The burning test is good for woolens. Pure wool smoulders when you set fire to it, and has a disagreeable odor like burning hair. The crisp ash tends to ball up along the edge into an irregularly shaped mass. But if there are other fibers present, the burning test is not satisfactory. Try the alkali test. Boil a sample of the fabric for 15 minutes in a strong alkali solution. This is made of 1 tablespoonful of lye to a pint of water. The wool will disolve and leave only the other fibers. This test won't work for a wool and silk mixture, because the silk will also dissolve.

Now about rayons. Two of the three types of rayon have many of the same chemical properties as cotton and burn like cotton, with a yellow flame, flashing along quickly. These two rayons are the viscose type and the cuprammonium type. Acetate rayon responds to the burning test by puckering and curling its edges, practically melting. Acetate rayon will also dissolve in a chemical called acetone. That's the liquid commonly used to remove fingernail polish. Chloroform also dissolves the acetates, and pressing with a hot iron sometimes melts this type of rayon.

Well, my time is up, and I've hardly scratched the surface of the new publication, Farmers' Bulletin 1831-F, Judging Fabric Quality. So be sure to send for a copy of your own. Its free, you know, as long as the supply lasts.

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