

# Oregon Agricultural College Extension Service

PAUL V. MARIS

Director

---

Cooperative Extension Work in Agriculture and Home Economics.  
Oregon Agricultural College and United States Department of Agriculture, Cooperating  
Printed and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914

---

## SILK

By

BLANCHE WHITTIER STEVENS,  
Instructor in Household Art

Silk is the fiber spun by the silkworm when making its cocoon. The fibers, known as filaments, are often 3000 to 4000 yards long. Silk taken from the "cultivated" silkworms is smooth, fine, and of good color. "Wild" silk, or uncultivated silk, is coarse, rough, and of dark color. Pongee and tussah are made of wild silk.

Silk that is reeled from the cocoons is the best. Waste silk, silk from poor cocoons or perforated cocoons, and silk shoddy, are prepared together and spun into yarn or thread. Silk fabrics made of this "spun yarn" are not smooth and lustrous, and wear fuzzy. Spun silk, however, is less expensive than "thrown" silk and can be made into attractive materials.

Much silk material is weighted to give it body. The process of weighting is to immerse silk thread or cloth in a solution of chemicals, such as tin, lead, or iron. Weighted silk never gives as good service as a non-weighted silk.

### TRUE SILKS

1. True silk is fine, soft, and smooth.
2. True silk is a very light-weight fiber.
3. It has a permanent high luster.
4. Silk filaments as they come from the cocoon or "unboiled" are the strongest of all fibers.
5. Silk is a poor conductor of heat, therefore feels warm.
6. Silk will absorb about 30 percent of its own weight of water, yet not feel wet.
7. Silk dyes easily, and holds the dye well.
8. Silk will absorb up to 400 percent of weighting.
9. Silk launders easily. It does not felt, mat, or shrink like wool.
10. Silk is turned yellow by washing in hot water, or drying in the sun.
11. Intense heat disintegrates silk. Always have iron moderately warm when pressing silk.
12. Acids and alkalis destroy silk. Salt water or tears will destroy silk.
13. Silk sheds dust and dirt quickly.

**Tests for True Silk.** Burn a sample of the silk. True silk burns slowly, the ash curling up in little tiny balls on the edge of the burning material. An odor like burnt feathers is given off.

**Test for Weighted Silk.** Burn the sample. If the sample holds its shape after the silk is burned, it contains weighting. Test taffeta, mes-saline, and crepe de chine to show the comparative differences.

Artificial and imitation silks do not give off the odor of burning feathers when burned. They flame up more than silk. They do not leave the droplet form of ash found when burning true silk.

### ARTIFICIAL SILKS

This class of fabric is made from cotton or wood pulp. The pulp is chemically treated and prepared to resemble silk.

1. Artificial silk is usually harsher and stiffer than true silk.
2. It has a more brilliant luster than true silk.
3. It is not as strong nor as elastic as true silk.
4. When wet, it loses much of its strength. Be careful in washing it to use lukewarm water.
5. It is a fair conductor of heat, therefore feels cooler than true silk.
6. Artificial silk is made to take the dye easily.
7. Artificial silks often cost as much, or more than true silk because of the high cost of manufacturing. A buyer does not object to buying or using these fabrics, if she is not permitted to think she is buying true silk.

**Imitation or Substitute Silks.** Mercerized cotton is used in the manufacture of many "silk" linings, tub silks, silkolene, threads, cotton taffetas, neckties, mufflers, hosiery, "silk"-mixed mohairs, "silk"-mixed woolens or worsteds, cotton damask, draperies, plushes, velvets.

**Plated Silk.** Cotton threads are covered with a thin silk coating, commonly used in neckwear, underwear, or hosiery. This silk wears off quickly, leaving a shabby undesirable garment.

### COLOR TESTS

1. Place sample in sunlight for two weeks. If it does not fade, it is "color fast." If it fades in a week, it is "moderately fast." If it fades in a couple of days it is a "fugitive" color.

2. Test wash silks by washing with mild soap in lukewarm water. Pat or suds instead of rubbing the silk. Squeeze it out; never wring silk out. Partly dry in a bath towel. Press with moderately hot iron. Has the weave pulled or twisted? Is the color affected? Has it shrunk badly? Has it kept its pretty, lustrous surface?

3. Does silk "water spot?" Test by sprinkling sample. Always test for water spotting. Many silks can be sponged or steam shrunk to prevent water spotting.

4. Spatter mud on silk. Dry and remove it. Is the material ruined? If so, what would happen to a dress made of this fabric?

5. Perspiration. Wear a sample of the silk in the foot of a stocking, or next to the body for several days. Is the color affected? What would happen to a garment made of this silk?

**Weave test.** Stretch the cloth lengthwise and crosswise over the thumbs. Do the threads pull or shift? Do they spring back to the original shape? Will this silk pull on the seams when made up?