Althaea officinalis L.

Standardized Common Name: Marshmallow

Family: Malvaceae

Taxonomy: *Althaea* includes about a dozen species, mostly European or Asian. *Althaea officinalis* is native to Europe, and is cultivated and sometimes naturalized in the United States.

Description: Perennial herb, to 1.2(–2) m tall, sometimes with a thick horizontal rhizome; multiple stems arising from a single rootstock, usually unbranched, the lower portions thick and woody; upper stems softly pubescent with grayish stellate hairs. Leaves alternate, ovate, softly pubescent with stellate hairs; base rounded to subcordate; apex acute; margins irregularly serrate, sometimes palmately 3-lobed, with lobes incised not more than halfway to base; venation palmate. Inflorescences mostly lateral, short-peduncled racemes, or terminal or flowers solitary. Flowers with an outer whorl of 6–9 linear to lanceolate, sepal-like bracts (epicalyx); sepals 5, ovate, curving over fruit; petals 5, pale pink, 15–20 mm long, obovate with notched apices; stamens numerous, the filaments fused into tube around styles, the anthers purplish-red; gynoecium of numerous fused carpels with separate styles. Fruit a whorl of mericarps, each 1-seeded, smooth-surfaced, pubescent with stellate hairs.

Parts in Commerce: Roots, usually peeled of outer cork, often sliced or chopped into small pieces

Identification:

- Cylindrical or slightly tapering, often spirally twisted, longitudinally furrowed, up to about 20 cm long and 1–2 cm in diameter
- Outer cork, if present, grayish to yellowish brown with numerous rootlet scars, fibrous, easily peeled off in long strips
- Outer surface of peeled roots whitish, finely fibrous; small brown rootlet scars may still be visible
- Inner tissues whitish, except for distinct brown to yellowish-brown or grayish cambial lines, and starchy
- Fracture of bark fibrous, of wood short and granular
- In cross-section, has brown cork and periderm (if present); whitish ring of cortex and secondary phloem with numerous narrow inconspicuous rays; cambial line; large, whitish to slightly yellowish multiradiate xylem
- Rays more easily seen, and large clear mucilage cells may be observed, when surface of cross-section is moistened
- Odor weak, aromatic
- Taste mucilaginous, slightly sweet

Because of its high mucilage content, *A. officinalis* has a swelling index of 10 or more, meaning that 1 gram of material mixed and allowed to stand in a measure of water should expand into at least 10 cc of mucilage (see the treatment of Psyllium for fuller explanation). The material must be ground to a fine powder before such a test is performed. A simple chemical test can also be performed by moistening a cut surface with a solution of sodium hydroxide (lye); the mucilage cells produce a yellow color.

Adulterants: Substitution of roots of *Alcea rosea* L. (Hollyhock), which has been previously placed in *Althaea* and resembles *A. officinalis*, is reported. Fractured surfaces are yellow; the fibers are coarser, and the texture may be harder.

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