

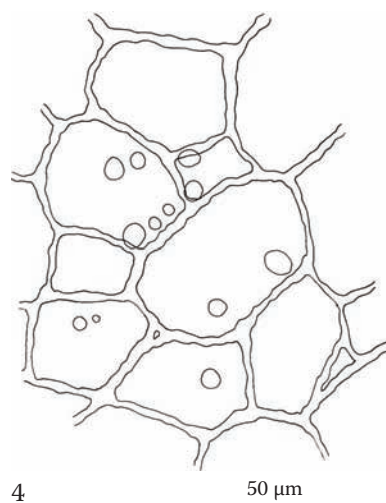
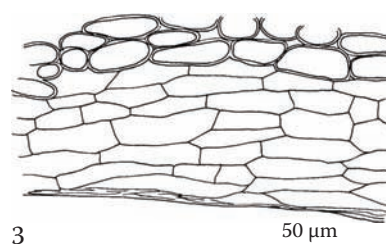
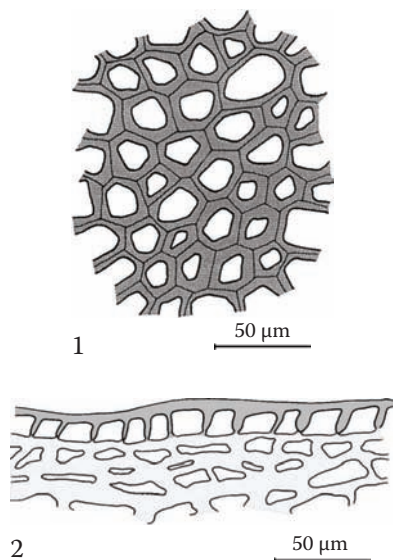
***Aesculus hippocastanum* L.****Horse Chestnut Seed***Semen Hippocastani**Hippocastanaceae*

Horse chestnut seed is one of the primary botanicals used in Western herbal medicine for the treatment of varicose veins. An extract from the seeds contains a saponin known as aesculin. The extract has been shown to be equal to compression stockings for the management of leg varicosities. Horse chestnut seed is not readily prone to adulteration.

**Transverse section:** Reddish brown testa epidermis consists of polygonal, thickened cells; subepidermal cells are thickened, dark brown, each with a small lumen; interior to these thickened cells, the cells become larger, with thinner, light brown walls; thin-walled innermost cells are often compressed; at the dull brown hilum, pitted sclereids and fibers are embedded in the testa; cotyledons are composed of large, colorless, polygonal, irregularly thickened cells with intercellular spaces; oil droplets are visible after boiling with chloral hydrate.

**Starch:** Abundant; simple, rarely compound, irregularly shaped, occasionally striated, 4–26  $\mu\text{m}$  long with the hilum asymmetrically placed.

**Powder:** Dark brown fragments of testa, parenchyma of cotyledons, oil, starch.

**Drawings**

1. Testa epidermis showing thickened polygonal cells (sv).
2. Outer portion of the testa showing epidermal cells and thickened subepidermal cells (ts).
3. Inner portion of the testa showing thinner walled cells (ts).
4. Parenchyma from a cotyledon, with oil droplets (ts).
5. Simple starch granules, each with an asymmetric hilum.