

## 37260 Ratanhia Root

German: Ratanhiawurzel  
French: racine de ratanhia

The botanical name of ratanhia is *Krameria triandra*, so it belongs to the *Krameriaceae* family. Ratanhia is native to South America and is mainly found at higher altitudes, between 1000 and 2500 meters, in Peru, Bolivia, Ecuador, Chile and Brazil. Traded is mainly the root, either whole or already cut into small pieces. More rarely, one finds ratanhia extracts, which are dry and have a dark black-brown color.

The coloring ingredients are found in the root, which is up to one meter long but only one centimeter thick, and belong to the class of tannins. The bark of the root is only a few millimeters thick, but contains particularly high levels of ratanhia tannic acid, about 40%. Inside the root, only about 10 to 15% of this tannic acid is still localized. By oxidation, a red phlobaphene, the so-called ratanhiarote, is formed from the ratanhiageric acid. In addition, the ratanhia root contains various catechins.

On wool, cotton or silk, Ratanhia extracts can be used to dye beautiful shades of red, which roughly correspond to a mixture of madder and orseille. To achieve darker shades, the fabric to be dyed should be mordanted. Ratanhia root is also used in the dyeing of leather; here the dyeing principle is phlobaphene, which is formed from ratanhia tannic acid by acid treatment. Due to the high tannin content, a tincture of ratanhia has been used in dentistry as a mouthwash.