

hol to the precipitate and distil, and the compound matter representing the veratria of MM. Pelletier and Caventou is obtained. In order to purify, it must be again treated with sulphuric acid, precipitated by potass, and dried. This is veratria in a pure state, and appears as a fine, white, and exceedingly acrid powder, alkaline, and capable of uniting with acids, but forming no crystallizable salts.

In order to separate the new substances discovered by M. Couerbe, this veratria is to be dissolved in water acidulated with sulphuric acid, and nitric acid added by drops, until a viscid precipitate (the black gluey matter) ceases. The liquid is poured off, and precipitated by potass or ammonia; the deposit is washed with cold water, and taken up by alcohol, which is evaporated, and the residue consists of all the principles above stated, minus the black matter. Boiling water dissolves the *sabadilline* and *gum resin*; the former crystallizes on cooling, and the second is obtained by evaporating the mother-fluids to dryness.

The water therefore still leaves two undissolved matters, pure veratria and *veratrin*. The former is dissolved and separated by ether, which leaves the *veratrin* undissolved.

PURE VERATRIA.

Pure veratria is white, solid, and friable, melts at 115° C., is insoluble in water, very soluble in ether and in alcohol. M. Couerbe states that when *pure* it crystallizes on uniting with acids, the sulphate, for instance, forming long and thin needles.

According to the same authority, the composition of veratria is,

	At. comp.
Carbon	71.247 = 34
Azote.....	4.850 = 2
Hydrogen	7.510 = 43
Oxygen	16.394 = 6

and therefore materially different from that of Pelletier and Caventou.

SABADILLINE.

This substance is in small crystals, or hexaedral prisms. It is white, excessively acrid, is not volatile, fuses at 200° C, and loses two atoms of water, by fusion. It is perfectly soluble in water and in alcohol, but utterly insoluble in ether. By most of these properties, therefore, it is distinguished from veratria. Its elementary composition, when anhydrous, is as follows:

	At. comp.
Carbon	64.65 = 20
Azote	7.50 = 2
Hydrogen.....	6.65 = 26
Oxygen.....	21.10 = 5

The sulphate of sabadilline crystallizes in prismatic needles, is fusible, and when fused, loses four atoms of water.

Gum-resin of the Veratrum Sabadilla.

It is yellowish, uncrystallizable, slightly alkaline, and, when perfectly dry, very friable. It is found in the mother-water of sabadilline. Alcohol dissolves any portion of it; water also and the acids easily dissolve it; only a very minute quantity is soluble in ether. It fuses at 165° .

It therefore bears a strong resemblance to sabadilline, but differs from it in its appearance, which is not at all crystallized. Its composition is the same as hydrated sabadilline, minus an atom of water.