tenths of the glucoside present in the leaves. No volatile constituent was isolated, no alkaloid could be detected, no Salicylic Acid was found. The presence of a glucoside was proved, but the glucoside was not isolated. Objection has been taken to the evidence of the uses of Violet leaves having been unfortunately collected chiefly by unskilled persons, and that it has therefore been lacking in definiteness, and consequently in value. After the definite expression of the opinions mentioned in the above reference, it is disappointing to find in a paper read before the Therapeutical Society, October 30th, 1906, and reported in the *Lancet*, '06, ii. 1318, that 'all attempts to isolate and identify a glucoside from Violet leaves have failed; similarly, there was no evidence of a ferment being present; the only positive fact resulting from the experiments being that the leaves and their preparations yield under certain conditions glucose.'

It has been pointed out that the reputation of Violets for the treatment of malignant growths was founded on the use of wild Violets, at least as far back as James I., and that it is therefore desirable that in any inquiry into the subject wild Violets should be used, such as have been used for centuries, and not a recent cultivated Violet as employed at the present time. In the light of the above remarks, the varieties official in the Continental Pharmacopœias will be of interest. It will be noted that wild Violets are official in the German and Swiss Pharmacopœias, and cultivated Violets in the Austrian.

Not Official.

YEAST.

BEER YEAST.

The ferment obtained in brewing Beer and produced by *Saccharomyces cerevisiæ*.

A viscid, frothy semi-fluid, possessing a sour vinous odour and a somewhat bitter taste. It is insoluble in Alcohol, practically insoluble in Water. Exposed to a moderate heat it loses its liquid portion and becomes dry, hard and brittle, and in this form may be preserved for some time, though apparently with a loss of much of its peculiar power. **Yeast cakes** are prepared by putting Yeast into sacks, washing with Water, submitting it to pressure, and ultimately drying it; **Compressed Yeast,** the undried product, is now largely used.

Medicinal Properties.—Antiseptic and stimulating; it has been recommended internally as a proteolytic against boils and carbuncles, and has been found useful in obstinate dysentery. In typhoid fever (*L.* '05, i. 463) 60 grammes daily, in 3 doses, commenced about the seventh day, to improve the gastro-intestinal symptoms, to reduce the temperature and diminish diarrhœa. Living Yeast does not possess any directly bactericidal or phagocytic properties. Injected intravenously it causes intravascular clotting of the blood. Subcutaneous injections of pure cultures of living Yeast can be made in animals without producing any ill effects. Killed Yeast produces the same effects as living Yeast. The immediate effect of subcutaneous injections is to produce leucopenia, rapidly followed by the leucocytosis. The effects produced by the injections of Yeast are probably due to the nucleo-albumen contained in the cells of the body generally, and cause a large increase in the antiseptic and anti-bactericidal substances normally present in the blood serum.—*B.M.J. Supplement* '05, ii. 7.

In furunculosis and acne.—*F.T.* '07, 19.

Dose.—½ to 1 oz. alone or with Water.

Furonculine and **Levurine** are powdered forms of dehydrated Yeast.

Not Official.

YOHIMBINE.

Silky white needles, or as a white inodorous amorphous powder, which has a tendency to change in colour on exposure to light; it should therefore be kept in well-closed glass bottles of a dark amber tint and protected as far as possible from

the light. It possesses a faint odour of Benzaldehyde. It is slightly soluble in Water, readily soluble in Methyl, Ethyl, or in Amyl Alcohol, in Ether and in Chloroform. It is an alkaloid derived from the bark of *Corynanthe yohimbi* (Schumann) or Yohimbehe tree, which grows in the Southern Cameroons district in Africa.

It is said to act as an aphrodisiac. It causes anæsthesia of the cornea and conjunctiva when dropped into the conjunctival sac. It is stated (*L.* '05, i. 1013) to be useful in chronic affections of the eye which require stimulation. It is preferred to Tropacocaine, as its effects are more persistent, and to Cocaine, as it does not affect the epithelium, interfere with the nutrition of the cornea or produce mydriasis and hypotony, and is, moreover, non-toxic. 25 c.c. of a 1 p.c. solution may be injected subcutaneously without harm, producing a local anæsthesia which lasts for nearly 2 hours. It has been found (*B.M.J.E.* '05, i. 28) useful in cases of toxic impotence. It is reported to have a favourable influence in cases of neurasthenic impotence.

Tests.—Yohimbine melts at about 234° C. (453·2° F.). According to Arnold and Behrens (*Pharmazeutische Zentralhalle*, xlii. 49) it has certain properties in common with Cocaine. It produces a temporary anæsthesia somewhat resembling that occasioned by Cocaine. They give the following reactions for distinguishing between the two:—The m.p., Cocaine melts at 98° C. (208·4° F.), Yohimbine as stated above; Cocaine Hydrochloride melts at 183° C. (361·4° F.); Yohimbine Hydrochloride has a m.p. as given below; Cocaine when heated for 5 minutes with Sulphuric Acid yields an odour of Methyl Benzoate, Yohimbine yields a faint odour resembling Peppermint; Cocaine when treated first with Fuming Nitric Acid and then with Hydrochloric Acid Solution gives no colour reaction, Yohimbine is coloured at first a deep green and then yellow by Nitric Acid, on the addition of Alcoholic Potassium Hydroxide Solution a cherry-red colour is produced; Cocaine remains colourless when dissolved in strong Sulphuric Acid, and when treated with Chlorinated Lime, Yohimbine gives an intense orange-red colour; Cocaine gives a black coloration when triturated with Mercuric Chloride, Yohimbine produces no such black coloration. When dissolved in strong concentrated Sulphuric Acid it affords on the addition of a minute crystal of Potassium Bichromate a beautiful violet coloration. It yields with Cane Sugar and Sulphuric Acid a wine-red colour. Attention, however, has been called to the fact that Saccharose, Glucose or Furfurol by themselves afford, with Sulphuric Acid, a red or reddish-violet coloration, and that Sesame Oil also produces a similar reaction. This colour reaction, therefore, cannot be regarded as serviceable for the identification of Yohimbine. 0·1 of a gramme when ignited with free access of air should leave no weighable residue.

YOHIMBINE HYDROCHLORIDE.—It occurs in colourless crystals, slightly soluble in Water. It is the Hydrochloride of the alkaloid Yohimbine.

It should be kept in well-closed bottles of a dark amber tint and protected as far as possible from contact with the light.

Tests.—Yohimbine Hydrochloride melts at 290° C. (554° F.); Cocaine Hydrochloride melts at 183° C. (361·4° F.). An aqueous solution affords an amorphous greyish-violet precipitate on the addition of Auric Chloride Solution (1 p.c.), an aqueous solution of Cocaine Hydrochloride yielding on the addition of the same reagent a pale yellow precipitate of microscopic needles.

Not Official.

YERBA SANTA.

The dried Leaves of *Eriodictyon Californicum* (Hook. and Arn.), Greene, are official in the *U.S.P.* They contain about 30 p.c. of resin, some essential oil, Glucose, two hydrocarbons, fatty acids, Phytosterol and three crystalline substances of a phenolic nature.—*J.C.S. Abs.* '06, ii. 885.

A stimulating expectorant, recommended in acute bronchitis.

Fluidextractum Eriodictyi (*U.S.*), 1 in 1, with a mixture of Alcohol (95 p.c.) 4 and Water 1; average dose, 17 minims = 1 c.c.