

Economy of the Vegetable Kingdom.

Lecture Delivered before the University of California College of Agriculture, on Monday, February 1st, by Prof. C. E. Bessey.

(From the Pacific Rural Press.)

The Nighthade, Star Apple, Tobacco, Etc.

The nighthade family, Solanaceae, are herbaceous or woody plants; in all about 1,000 species, of these a very few species are found all over the world...

Pervaded by This Narcotic Poison;

So, of course, it is unhealthful to make use of them.

The egg plant, Solanum melongena is another South American plant. [Fig. 1.] It bears large egg-shaped fruits which are used in cooking. It has never come into general use...

The tomato, Lycopersicon esculentum, also from South America, is now largely grown for its delicious fruits, though for many years after its introduction it was supposed to be poisonous...

Another plant is the ground cherry or cherry tomato. It belongs to the genus Physalis, and is a little, low plant, with yellow, or orange-colored fruit...

Cayenne pepper is the product of Capsicum annuum, a South Asiatic plant, coming from India, now largely grown in all warm climates.

Stramonium, or thorn apple—you see we are passing from the food plants to the medicinal ones—Datura Stramonium, is a large ill-scented weed...

Drugged Liquors. When any one is put into a stupor through taking certain liquors, generally stramonium has been used in the liquor.

Belladonna is a product which has a better reputation and is derived from the perennial herb, Atropa belladonna, a native of Europe.

Tobacco, Nicotiana glauca, is a native of the warm portions of America. [Fig. 3.] It was used by the original inhabitants of this continent long before the Europeans came here...

Every Fourth Man. Makes use of tobacco. A greater part of the product is derived from the United States. There is a strip of country including Virginia, Ohio, Pennsylvania and running down into New England...

Among the weeds we name black nighthade, which is a remarkable plant botanically, from this fact: that it is found running as far north as a plant will grow...

Next we take up several small groups of but few species, but of considerable importance, and first is the Ebony Family.

Among the flowering plants only one is worth mentioning, and that is peruvia. This, within the last six or seven years has been considerably improved, although a few years ago it was called old-fashioned.

Referring again to tobacco, I just want to make one remark: You will find the statement frequently in our agricultural journals that tobacco is not an American plant.

The second order, the Mints. Of the order Labiales, are herbs or small shrubs, never trees; mostly with square stems, very abundantly distributed, but most abundant in the temperate zone.

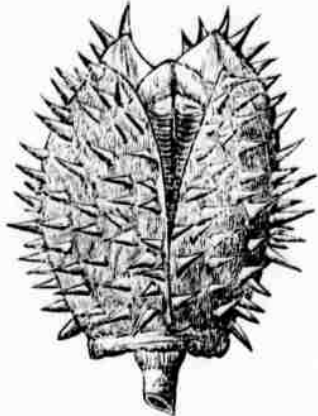


Fig. 1. Seed Pod of Thorn Apple—(Datura Stramonium).

wards of 2500 species, throughout nearly all of which is to be found a highly aromatic and pungent property which has caused them to be long held in high repute as possessing medicinal virtues.

First, is lavender, from the Lavandula vera, which is a little shrubby plant found in South Europe, grown for its leaves; from these by distillation is obtained oil of lavender.



Fig. 2. Egg Plant.

facture of cologne water—is one of the more important ingredients in the latter.

There are a great many others. I simply will mention a half dozen or more of them in testimony of this fact, that the order is an order of perfume.

Some of these, as peppermint and pennyroyal, are used in domestic practice. It is my opinion that they are quite harmless, but as to their real virtues, I doubt whether they possess any.

A few plants of the order are of ornamental value. Two are in quite common use—Colum and Perilla; these are the generic names.



Fig. 3. Tobacco Plant.

east, in both uses; here, out of doors. Sage, an Indian species, and smetropical, are grown for ornamental purposes.

There are but few bad weeds. I do not call to mind a single one but that can be readily driven out. As soon as you use the plow or hoe they disappear.

Ebony Family. Sassafras, a small group of only a hundred and sixty species, found chiefly in the tropics. It derives its name from the ebony trees of the East Indies...

ness would be desirable. This American holly is like that, but it usually grows so small it cannot be used. This is frequently taken, and wrought into the proper shape, produces the material called ebony, and is used as a substitute for it.

Sold as True Ebony. The true ebony should not have the appearance which you will see if you hold it up to the light in the proper way.

Grown in Southern California. If not already introduced, it could very profitably be brought into the United States.

Form another small order, the order Sapotaceae, which includes about two hundred species, mostly tropical, and they are all either shrubs or trees.

The Star Apples. In addition to American Patents, we secure with the assistance of co-operative agents, claims in all foreign countries which grant Patents...

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Should Not Have Had Atlantic Cables. At least, for some time yet. In order to prevent at the great waste resulting from the present method...

Now, Europeans pay no attention how the natives get the material together at the seaports. In some species, this milk is used for food by the natives.

The star apple and the sappodilla plum, of the West Indies, are large trees bearing delicious fruits about the size of an apple...

The last family to which I call your attention, is the Holly Family.

Or, the Aquifoliaceae, a small group numbering about one hundred species, all of which are trees or shrubs.

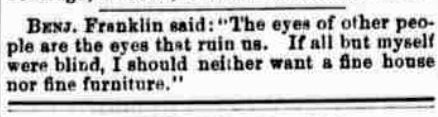
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Paraguayan tea or "mate" is derived from another species of this Ilex, I. Paraguayensis, a little shrubby plant. The leaves are gathered, scooped, pounded and then used very much as Chinese or Japanese tea...

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