

Rub the oils with powdered licorice, add a portion of syrup, rub smoothly, and mix the whole together by agitation.

ORCEAT SYRUP.

Take of Cream syrup, $\frac{1}{2}$ pint.
Vanilla syrup, 1 pint.
Simple syrup, $\frac{1}{2}$ "
Oil bitter almonds, 5 drops.

Mix.

COFFEE SYRUP.

Take of Ground roasted coffee, 4 ounces.
Boiling water, 2 pints.
Sugar, 4 pounds (com.)
Infuse the coffee in the water until cold, strain, add the sugar, and make a syrup.

STRAWBERRY SYRUP.

Take of Fresh ripe strawberries 10 quarts.
White sugar, 24 pounds.
Water, $\frac{1}{4}$ gal.

Spread a portion of the sugar over the fruit, in layers, let it stand four or five hours, express the juice, strain, washing out the marc with water; add remainder of sugar and water, raise to the boiling point, and strain.

SYRUP OF RASPBERRY.

Proceed as for Strawberry syrup.

PINE-APPLE SYRUP.

Take of ripe pine-apples, No. 2 or 3.
White sugar, 16 pounds.
Water, q. s.

Cut the fruit in thin slices, spread sugar over them, let stand 12 hours. Pour off juice and sugar, and set aside. Express the fruit, adding a little water. Then take water, q. s., to make, with the above liquid (juice and sugar), 1 gal. Form a syrup with the sugar and water, and boil the pieces of the fruit already expressed. When the syrup is nearly completed add the fluid and boil a few minutes, to clarify. Remove scum and strain. These three fruit syrups should be bottled when warm, corked tightly, and when wanted for use add equal parts of the fruit syrup and simple syrup. They will keep a year without change.

NECTAR SYRUP.

Take of Vanilla syrup, 5 pints.
Pineapple " 1 "
Strawberry or Raspberry 2 pints.

Mix.

CREAM SYRUP.

Take of Fresh cream, $\frac{1}{2}$ pint.
" milk, " "
Powd. sugar, 1 pound.

Mix, by shaking. Keep in a cool place. The addition of one half drachm bicarb soda to this syrup will prevent rapid change.

Lime Juice.

The *Chemist and Druggist* gives the following particulars in regard to the lime tree, and the collection of the juice of the fruit, as carried on at Montserrat:—

The lime tree, a native of Western Africa, seems early to have found a congenial *habitat* in Montserrat. In the autobiography of a negro, who obtained his freedom about the year 1750, he mentions his first profitable adventure, as consisting in trading in this fruit to the neighbouring islands. The tree, however, has never been made an object of extended and systematic cultivation till within the last twenty years. Its form is that of

a large Lauristina bush, spreading in some instances over the ground for twenty to thirty feet; its foliage is like that of the myrtle, but with leaves of brighter green. It is armed with sharp thorns, making it often difficult to gather the fruit from the interior of the tree. The blossom is smaller than that of the orange, with a powerful fragrance. The crop is principally gathered in the months commencing with July, and ending with February, the trees often displaying at the same time the blossom and the ripe limes, with the green fruit in all its intermediate stages of growth.

The plantations ranging along the shore for about two miles, extending in one direction to about 1,500 feet up the mountain steeps, with space between the trees to admit of the pasturage of cattle among them.

During the season of crop, the fields are traversed by a large company of young negroes, with a woman superintending them, who gather the ripe fruit into wide open baskets. When these are all filled, they are taken direct to the presses at the boiling houses, and a large company of "little people," as they are termed proceeding with quick step in long Indian file, with the bright yellow fruit on their heads contrasting with their dusky figures, now lost among the lime trees, now emerging into the open path, presents to the stranger a curious and novel spectacle unique in its kind.

So the fruit, on it reaching the works, is passed through a machine driven by the mountain stream, which cuts it into slices, when it is transferred to the presses for the expression of juice, which is then evaporated to about the consistency of honey for the manufacture of citric acid.

When, however, it is to be shipped as fresh juice, the fruit is first carefully sorted, and the unripe or over-ripe limes rejected, and when transferred to the presses, only two-thirds of the juice is pressed out for this purpose; it being found that the last portion resulting from extreme pressure is of diminished strength and quality. This purer juice, being run from the presses at once into casks, is immediately secured from the air, so as not to be opened till its arrival in England.

The lime tree requires a period of from seven to ten years from the time it is planted before it makes any considerable return in fruit.

Montserrat, like the adjoining islands, is occasionally visited by earthquakes. In that of 1843, occurring in dry weather, the large quantity of rocks and boulders detached from the mountain summits enveloped them in such an atmosphere of dust, that the captain of the intercolonial mail steamer, passing at the time, reported that the island had, in the convulsion, sunk under the ocean.

American Quercitron and Sumac

Alex. C. Macrea, Anglo-American Produce Broker at Liverpool, England, sent out circulars last fall, showing the value of these two articles of commerce. Of sumac he states that Liverpool frequently imports from Sicily 6,417 bags a day, and exports to America in one day 1,200 bags, and then goes on to explain the utter fallacy of our permitting such a foolish work. He says that from actual experiments, the American

sumac contains from 10 to 20 per cent more tannin than any other, and yet we import the product of other countries. Mr. Macrea asserts that we should be reaping the benefit of selling thousands of tons of this article, at \$125 per ton, instead of importing the same, as it grows in great quantities in Maryland, Virginia, and other States. Of quercitron (ground black oak bark), he says:

"Our chief supply of quercitron has, ever since its general introduction fifty years ago, reached us from Philadelphia and Baltimore, with occasional consignments from New York. Philadelphia bark comes in hogheads, as is well known, and from the fact that in Philadelphia it is branded 'first sort,' and must consequently be up to the mark in quality, gives a reputation to that port, which no other rivals. Baltimore comes in bags, and most of it is intrinsically the same as that which comes from Philadelphia, but from the fact that it is not so carefully ground or packed, fetches, as will be seen by the quotations, a much lower price: 1st Philadelphia, in hogheads, \$60 per ton. 1st and 2nd Baltimore, in bags, \$35 to \$46 per ton."

"As this article abounds in untold quantities in Maryland, Pennsylvania, Virginia, etc., and as the consumption in Europe is enormous, it may be well to call attention to a 'new feature,' which will give more general employment, and benefit everybody. The 'new feature' is to send the bark 'pulverized' like flour or florine. This attained, port of shipment or place of production makes no difference, whereas the value increases to \$70 to \$80 per ton. Indeed, in the first instance, I myself made \$90 per ton, and fully believe in perpetuity this will be nearer value. Wherever bark or sumac mills abound, their present machinery can readily be adjusted to do the work of fine 'grinding;' when nothing remains but its being packed in hogheads lined with paper, and shipped to England from any contiguous port. The consumption will be largely increased."—*Scientific American*.

Application of Picric Acid for Imparting to Ivory Bone, and Horn a Beautiful Red Color.

According to C. Mene the following recipe will impart the required color. Take 4 grms. of picric acid, and dissolve in 250 grms. of boiling water; add, after cooling, 8 grms. of liquid ammonia. Dissolve also 2 grms. of crystallized fuchsine (magenta) in 45 grms. of Alcohol, dilute with 375 grms. of hot water, and next add 50 grms. of ammonia. As soon as the red color of the magenta solution has disappeared, the two solutions are mixed together, making a bulk of liquid amounting to about half liter, which is a sufficient quantity for dyeing from four to six sheep's skins. Ivory and bone should be placed in very weak nitric or hydrochloric acids first, before being immersed in the ammoniacal liquid; wood cannot be dyed by this liquid, unless it has been previously painted over with paste made from flour. When, to the ammoniacal liquid, some gelatin solution is added, it may serve as a red ink which does not attack steel pens. By varying the proportions of the magenta and picric acid, the tints obtained may be varied from a bluish red to a bright orange red. The desired colors do not appear until the ammonia has evaporated.—*Scientific American*.