

ALIEN PROPERTY CUSTODIAN

RED PEPPER SURROGATE

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No Drawing. Application filed April 28, 1941

This invention relates to a spice which can be used as a substitute for red pepper, and to a method of producing said substitute spice.

It is an important object of the present invention to produce a substitute spice for red pepper which is free from capsaicine.

Another object of the invention is to produce a substitute spice for red pepper which regarding its colour and its dyeing effect upon the food is superior to, and more uniform than, natural red pepper.

According to the present invention, finely sieved flour of not unrolled mustard-seed is mixed with a carrier matter consisting of flour of low gluten content, of the group comprising the flours of grain, legumes or roots, with fat-soluble red-coloring substances, e. g. azo-dyes, and with ingredients constituting a red pepper aroma.

As a carrier material, for instance, potato flour or fecula, rice flour, soya bean flour or chicory flour may be used. If desired, other suitable vegetable substances having the spicing effect of red pepper may be substituted for non-unrolled mustard seed. The spice resulting from the process according to the invention is of reddish colour and has a uniform red-coloring effect upon food-stuff.

The following examples of processes for making spices will illustrate the invention, but it is to be understood that the invention is not limited to the details set out in this example nor to a spice having the specific properties recited.

Example 1

5 parts of flour of mustard seed, 3 parts of potato flour, 1 part roasted chicory flour, 1 part fat-soluble red dyestuff and 1 part of an oil having an ethereal red pepper aroma, such as for instance, a distillate of red pepper fruits, or a synthetic scent, are mixed together.

Example 2

An artificial capsaicin-free red pepper, grade fine-sweet (edels  ss) is obtained by the following mixture:

	Parts
Very finely ground and sieved flour of mustard seed.....	100
Potato starch.....	2 1/2
A fat-soluble red dye, dissolved in 6 parts of Edible oil.....	0.3
Sugar.....	2
A distillate constituting the aroma of red pepper and produced from red pepper legumes or synthetic scent.....	1/2

The proportions of the mixture may be varied depending on the desired features of the red pepper substitute to be produced, in conformity with the various qualities of natural red pepper.

The spice substance may be produced in a wet or dry process. In the wet process, unrolled mustard seed which owing to its extremely high fat content and the toughness of the husks, which are also very fatty, cannot be ground up to the full, is finally sieved. This mustard seed is at first mixed with potato flour, adding water or preferably skimmed milk. Now, sugar is added and intimately mixed with the said substances. It is only in this stage of the process that the red dye is added. It is important that the carrier material, i. e., the potato flour, be free from gluten and that the specified order of mixing the substances be kept to, in order to prevent the formation of lumps which would cause a non-uniform coloring of the spice proper and of the food colored thereby.

The ingredients may be mixed together with the aid of dough-kneading machines similar to those used in bakeries. The mixture is then dried, either by spreading it, for natural air-drying, or by means of hot air drums, heated belts or heated stoves. Care should be taken, however, that the temperature in the drying process will not exceed 70° C, since the oils and alkaloids contained in the mustard seed flour and embodying the spicy matter which is typical for natural red pepper would evaporate with higher temperatures, whereby the product would become worthless.

The dry product is then ground up to fine powder, for instance, on ordinary cross beater or hammer mills, at a temperature of at least 60° C, but not over 70° C, and the powder is provided in mixing drums with a red pepper aroma which, as above mentioned, may consist of an essence of red pepper husks, or of a synthetic scent.

The application of a temperature of at least 60° C in the grinding operation will result in a more rapid and more intensive coloring and save at least 60 percent of dyestuff.

In the dry process, on the other hand, extremely fine grinding and sieving of the mustard seed oil is required. The above mentioned ingredients in this case may be mixed together in any desired order, without adding water or skimmed milk. After the mixture has been finished, but preferably before adding the red pepper aroma, the mass is ground up under pressure and heat, for instance, in high speed spice mills, or preferably on a millstone, whereby oil is squeezed out

of the mustard seed flour which is essential for securing an intimate compound with the dye-stuff, i. e. a satisfactory coloring, in the dry method. For the same purpose it is important that the grinding operation should be carried out at a temperature of at least 60° C, but under 70° C. 5

Edge runners may also be used for the grinding and milling operation. It should be noted moreover that all the above stated proportions are by weight.

The method of the present invention has been described in detail with reference to specific embodiments. It is to be understood, however, that the invention is not limited by such specific reference but is broader in scope and capable of other embodiments than those specifically described.

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