WAYS TO IMPROVE PROCESSING FRUIT AND BERRY RAW MATERIALS

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Theoretical researches in the direction of processing of fruit and berry raw materials give incomplete, but more or less understandable position of the main directions in the implementation of new non-waste technologies.

The technological process of canning production is closely linked to the presence of a large amount of waste: fruit cakes, fruit pips, seeds. The share of waste in the industry is on average 25–40% of the mass of recycled raw materials. The waste contains valuable nutrients and can therefore be used at this plant as new raw materials or semi-finished products, processed for the manufacture of other food and technical products or sold to other enterprises. The products of waste processing are pectin, oil seed oils, jam, alcohol, etc (fig. 1).

The technological process of producing fruit and berry products is usually characterized by continuity, except for minor breaks for washing machines of a short duration, usually as a change, so there is no work in progress.

The feature of fruit and berries processing enterprises is that they are technologically preliminary, that is, the products are processed on a whole series of successive stages (redistribution) of production: inspection of raw materials, sorting, washing, machining, blanching, packaging, etc.

The diversified technology of processing agricultural raw materials and the wide range of manufactured canned products makes use of various types of packaging for its packaging. Salted and leftover vegetables are packed in barrels, dried fruits and berries – in bags, cans – in tin and glass containers. In addition, the current requirements for the appearance of products lead to the need for using disposable packaging, manufactured according to models of advanced foreign enterprises. Variety of types of packaging and packaging methods cause the use of various accounting and costing units and affect the process of forming the cost of canning products.

All of the above-mentioned features make it possible to draw the following conclusions regarding the strategic reference points for the enterprises of the processing industry for innovative development, which includes: an integrated approach to the processing of agricultural raw materials; expanding the range of products at the expense of innovative

products; the introduction of innovative resource-saving technologies; use of innovative logistics schemes; creation of an effective system of supervision of product quality.

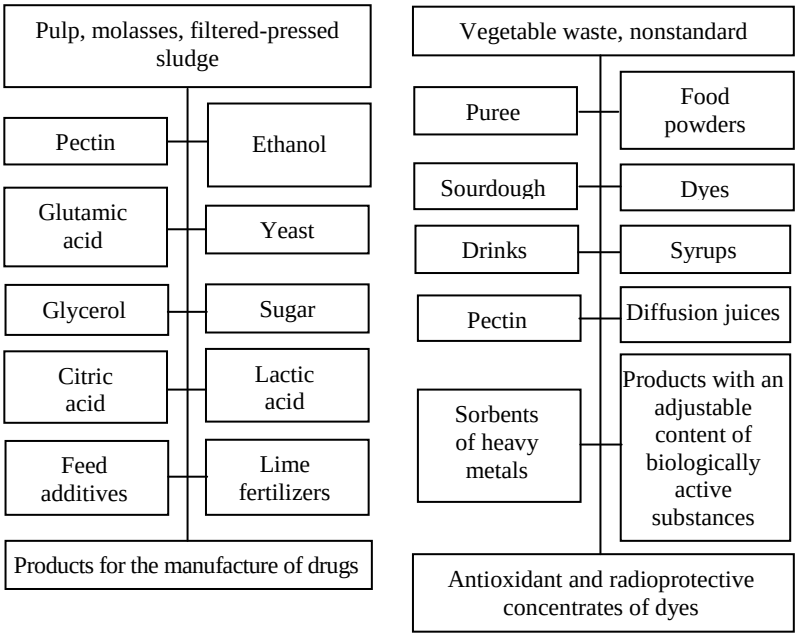

Fig. 1. Scheme of non-waste technology for waste processing of the main fruit and berry production

Because of the impossibility to have small-scale producers of fruit and berry products their processing shops, it is necessary to create processing associations for the production of certain types of processing. A compulsory structural element of such associations is the developed dealer network for the implementation of manufactured products.

Today, a landmark for creating large super-heavy fruit and vegetable processing complexes that has become an obstacle to the development of the processing industry around the world has been replaced by a targeted policy for the creation of new processing plants of low and medium capacity. Therefore, there is a need for intensive changes associated with the creation of new technological processes for the processing of fruit and berry raw materials, as well as the creation of new types of technological equipment, characterized by a high level of technical improvement.