тенденціям. Розвиток квіткового виноробства може збагатити асортимент українських вин, зробивши його більш різноманітним та конкурентоспроможним на світовому ринку.

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WAYS OF IMPROVING THE BIOTECHNOLOGY OF FETA-TYPE CHEESE

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Pickled cheeses are a type of cheeses that are made by soaking in brine, which involves immersing the cheese in a salt solution for a certain time. The result of this treatment is a change in the structure of the cheese, its softening, opening of pores, and the addition of a sweet or savory flavor. Pickled cheeses represent a category of cheeses that have undergone a maturation process in brine to enhance their flavor qualities and better preserve the product.

Feta is a soft white cheese with 20–25 % fat content, cured in brine, with salty-sour taste. Traditionally, feta is made from sheep's milk or a mixture of sheep's and goat's milk, which gives it a characteristic slightly piquant and salty flavor. In addition, feta may have a distinct rancid flavor, which can be imparted by introducing various agents into the cheese and is associated with intense lipolytic activity.

The main cultures used for the production of pickled cheese with a low temperature of the second heating are those containing lactic acid bacteria (*Lactococcus and Leuconostoc*). *Lactococcus lactis* is a species of Gram-positive, non-motile, non-spore-forming bacteria. The latter means that this bacterium typically cannot colonize the human gastrointestinal tract. *Lactococcus lactis* is used for the production of cheese and kefir. It remains one of the most important bacteria in the dairy industry due to its ability to produce lactic acid from lactose (milk sugar). *L. lactis* is divided into three subspecies: *L. lactis subsp. lactis; L. lactis subsp. cremoris; L. lactis subsp. hordniae. Leuconostoc mesenteroides* has two main subspecies, namely: *Leuconostoc mesenteroides ssp. cremoris* and *Leuconostoc lactis.*

Pickled cheeses are made on both a milk fat base and a milk-vegetable fat mixture. Soft pickled cheeses like "Feta" are packaged without brine, or with brine, or in vegetable oil with added spices. The main stages of its production that affect the quality of the final product can be distinguished. Although some types of pickled cheese are produced with certain differences in technology. The modern technological process of producing pickled-type cheeses consists of the following stages: receiving, assessing the quality and primary processing of raw materials;

reserving and intermediate storage; heating, ultrafiltration, intermediate reserving; heating, homogenization, pasteurization and cooling of the concentrate; packaging and adding enzyme, starter culture and salt to the concentrate, packaging, labeling; souring; cooling, ripening, storage and sale. The technology of producing pickled cheeses like feta can be improved by making cheeses with the addition of paprika and lamidan.

In Ukraine the leading feta cheese producers are "Molochny Shlyakh", "Bilotserkivsky Molochny Kombinat", "Yagotynsky Maslozavod" and others.

Improving feta production with rational use of whey for coagulation of milk proteins and preparation of brine during ripening will increase efficiency, improve quality, ensure product competitiveness, and meet consumer requirements.

PROBIOTICS TO RECOVER SOIL MICROBIOTA FROM THE EFFECTS OF THE WAR

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The war is causing long-term damage to Ukraine's soil. A large area of land will be unsuitable for agricultural use due to the huge number of sinkholes, tonnes of scrap metal and carcinogenic waste, and pollution with heavy metals and chemicals. But there are solutions that can, if not save the situation, at least lessen the impact.

Toxic elements such as lead, cadmium, arsenic and mercury will leach from ammunition and weapons and leach into the soil. As plants grow and develop, they will absorb these potentially toxic elements, with background levels up to ten times higher than normal. Other elements, such as zinc and nickel, will seriously inhibit crop growth. And this is only a part of the hazardous substances that will contaminate our soils for years.

Soil contamination can be a hidden danger. If potential areas of contamination are not identified and fixed in time, harmful substances will get into the grain and poison the crop. This is a direct threat to food security and export opportunities.

Soil microbiota is also affected by military operations. In the case of heavy metal contamination, microbiological preparations can reduce the intake of toxic elements into the plant. This will allow the crop to grow and develop, and keep the level of contamination within acceptable limits.

If the field is burnt out, the upper soil layer (up to 5–10 cm) is completely or partially sterilised, and the application of microbiological preparations will also help to restore the microflora more quickly.

These products can also help with the problem of fuel and oil contamination of soils. Studies have shown that certain groups of microorganisms in areas contaminated with oil products contributed to their destruction three times faster.