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## IDENTIFICATION AND CUSTOMS REGULATION OF FRESH APPLES

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### INTRODUCTION

Consumer properties of fresh fruit and vegetable products are determined by their energy, biological, therapeutic and prophylactic, physiological, organoleptic value, structural and mechanical properties, quality and safety.

Fresh vegetables and fruits occupy a significant share in the diet of the population, being a source of substances necessary for the human body, such as vitamins, carbohydrates and mineral elements. From a commodity perspective, fresh fruit and vegetables are distinguished by a wide variety of botanical varieties that differ in appearance, taste, transportability and storage capacity. Such products are perishable and easily affected by mechanical factors, insect pests and pathogens. Today's market offers a wide range of fresh fruit and vegetable products through the sale of domestic varieties of fruits and vegetables, as well as imported products.

The extent to which the population's demand for fresh fruit is met depends not only on production and import volumes, but also on the storage conditions. Ensuring the safety of fruit and its uninterrupted supply requires specialized knowledge in the field of fruit and vegetable identification, quality and safety indicators, methods and techniques of packaging, labelling, transportation and storage – both for the domestic consumer market and for imported fruit entering the Ukrainian market.

Therefore, it is important to study the quality of fresh fruit according to and identification of a batch of fresh apples entering the consumer market and, accordingly, the issues of studying their quality and identifying the peculiarities of customs clearance in international trade.

The purpose of the study is to identify and regulate the customs movement of fresh fruit across the customs border of Ukraine.

To achieve this goal, the following tasks were set and solved:

- analyze the trends in the functioning of the fruit and vegetable market in Ukraine;
- study of the assortment of fresh fruit on the Ukrainian market;

- characterization of market quality requirements for imported fresh apples;
- identification of the batch of imported fresh apples;
- studying the customs clearance procedure on the example of fresh apples.

### 1. Structure of the Ukrainian fresh apple market and their identification

Fresh dessert apple production in the EU averages 12.0 million tons per year and is valued at € 4.5 billion. The growth of fresh apple production in the EU has averaged 2,9% per year over the past five years.<sup>1</sup>

Table 1

#### **Analysis of apple production in the EU (including UK data)**

Country	Production volumes, thousand tones	
	2021	2022
Poland	4300	4495
Italy	2053	2150
France	1383	1468
Germany	1005	1007
Spain	563	431
Hungary	520	350
Portugal	368	294
Greece	246	294
Netherlands	243	245
other	1335	1434
Total	12016	12168

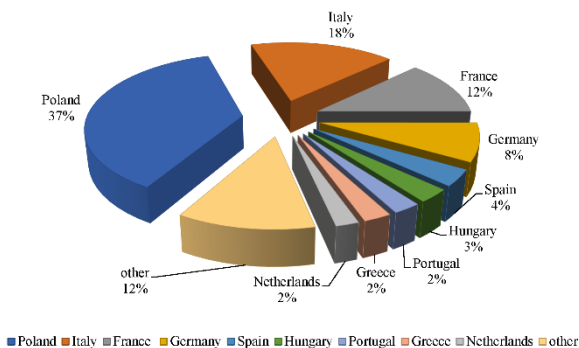
In the EU, the main apple producers are Poland, Italy and France. Poland is known as the "Garden of Europe" due to its largest orchard area in the European Union and high export results.

The main problems of the European apple market are overproduction and the lack of new open markets.

However, the potential overproduction of apples is not as frightening for European producers as the new European strategic course such as the Green Deal and Farm to Fork, which plans to drastically reduce the use of pesticides and other plant protection products, as well as mineral fertilizers.

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<sup>1</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/rxfhtq> (дата звернення 16 лютого 2024 року). С. 6-7.



**Fig. 1. Structure of the apple market in the EU**

Since 2021, some farmers have faced problems protecting their gardens due to restrictions or bans on plant protection products such as the fungicides Captan and Dithianon. Without them, according to representatives of the horticultural industry, the existing schemes for protecting apple orchards may not be effective.

Another problem is the shrinking markets. For many years, the Russian Federation has been the main importer of apples from the European Union. However, due to the embargo on European fruit, European producers are forced to look for new markets. Since a significant part of the production aimed at the needs of the Russian customer has been curtailed, the countries of North Africa and Central Asia have proved to be excellent partners in this regard. Over the past 6 years, there has been a steady increase in fresh apple exports to Egypt, Syria and Lebanon. This creates great opportunities for both the EU and Ukraine.<sup>2</sup>

European and Ukrainian growers also need to take into account the growth of apple production in Turkey and Iran. These two countries are becoming the largest apple exporters in the world, creating competition for Moldova and Ukraine in the Middle East and Asia. It is also worth noting the growth of apple production in Georgia and other countries of the Caucasus and Central Asia, which negatively affects the overall balance of apples in the region.

However, despite the actual overproduction of apples, European countries still import these fruits, especially certain varieties, from other countries. The largest importers of apples are the United Kingdom – 158,0 thousand tones; Belgium – 26,8 thousand tones; and the Netherlands – 126,7 thousand tones.

<sup>2</sup> Експорт плодів та горіхів до ЄС: перші кроки // Агробізнес сьогодні. URL: <https://agro-business.com.ua/agrobusiness/item/10213-eksport-plodiv-ta-horikhiv-do-yes-pershi-kroky.html> (дата звернення 18 лютого 2024 року).

The largest exporter of fresh apples to the EU is Chile, which accounts for 34% of EU imports, with almost two-thirds going to the UK and the Netherlands.

The volume of fresh apple production in the European Union is about 9 times higher than the volume of imports in terms of value and 25 times higher in terms of quantity. However, over the past 5 years, apple production has been slowly growing, while imports to the EU have slightly decreased (+2,9% compared to – 1,4%). This indicates relatively stable production and imports.

Ukraine, as a major apple producer, also has a very large potential for production growth in this sector. Unfortunately, this is largely dependent on both the political situation in the country and the weather. Spring frosts, drought, heavy rain or hail are the main factors that determine the size and quality of crops. In Ukraine, due to the variability of the temperate climate, conditions are particularly challenging and make it difficult to plan crops in a particular season. Ukraine also already exports to the EU market. In 2017–2019, its average share in EU apple imports was less than 1% (3,771 tonnes worth €2.50 million (average import price of €0.66/kg)). Ukraine has seasonal tariff advantages compared to its main competitors (South Africa, New Zealand), except for Chile. There are additional opportunities for the development of this market both in terms of replacing competition in third countries and in view of the growth of expected demand in the future (provided it grows in the next few years)<sup>3</sup>.

The high level of integration of agricultural supply chains and EU policies makes it difficult to compete with EU producers, so imports complement production to meet domestic demand. Therefore, Ukrainian fresh produce exporters compete with other suppliers.

All fresh fruit and vegetables must meet EU market standards. This includes the presentation and classification of goods, as well as which competent authority in the EU has to approve the products for retail sale.

While many fresh products are subject to general requirements, there are still specific requirements for the retail sale of apples. Fresh apples intended for processing are not subject to EU market standards, but according to Commission Regulation (EU) № 543/2011, the packaging of products must be clearly marked with the words "intended for processing" or other equivalent wording. The tables in Annex B provide general market requirements for the classification to be indicated on the packaging.

To be placed on the European market, fresh fruit must meet EU safety requirements:

- control of contaminants in foodstuffs in accordance with Regulation (EC) № 315/93;

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<sup>3</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проєкт «Агроторгівля України» <http://surfl.i/rxftq> (дата звернення 16 лютого 2024 року). С. 8-10.

- control of veterinary drug residues as defined in Regulation (EC) № 470/2009;
- control of pesticide residues in products of plant origin as defined in Regulation (EC) № 396/2005;
- control of the safety of food of animal origin intended for human consumption in accordance with Regulation (EC) № 852/2004.

Also, when organizing exports, it is necessary to:

- certify the batch for compliance with international standards (if necessary): ISO 22000, FSSC 22000, BRC, IFS;
- ensure proper labelling and provision of relevant product documents in accordance with Regulation (EU) № 1169/2011;
- to obtain a veterinary or phytosanitary certificate;
- register export facilities in the relevant register of the State Service of Ukraine on Food Safety and Consumer Protection;
- to obtain the EUR.1 certificate.

If a food product is included in the list of organic products, it must comply with the EU rules established by Council Regulation (EC) № 834/2007 (OJ L-189, 20.07.2007).

As for third countries, inspections can be carried out by any accredited certification and control bodies, including those in Ukraine (although many other bodies in other countries can also carry out inspections in Ukraine). Regulatory requirements for fresh apples <sup>4</sup>:

- ensuring that fresh produce meets EU requirements through testing;
- requirements for contaminants and microbiological criteria set maximum permissible levels of cadmium, lead, salmonella, listeria and E. coli;
- levels of pesticide residues depend on the chemical composition of the pesticides used, and limits are set accordingly;
- for fresh apples, clear market standards are set for quality, varieties and sizes that must be adhered.

All fresh fruit and vegetables must meet EU market standards. This includes the appearance and classification of the products, as well as which competent authority in the EU must approve the products for retail sale.

While many fresh products are subject to general requirements, there are still specific requirements for the retail sale of apples. Fresh apples intended for processing are not subject to EU market standards, but according to Commission Regulation (EU) No 543/2011, the packaging of products must be clearly marked with the words "intended for processing" or other equivalent wording. Tables 2 summarize the common market requirements for the classification to be indicated on packaging.

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<sup>4</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/pxfiq> (дата звернення 16 лютого 2024 року). С. 15-16.

There are many different varieties and types of fresh fruit (over 7,000), which differ in colour, taste and shape. As for apples, the most common division is into dessert apples (consumed fresh), processing apples (suitable for further processing, such as applesauce, pectin, etc.) and cider apples (for the production of apple juice and wine).

Table 2

**Minimum market requirements for fresh apples (Part B of Annex I to Commission Implementing Regulation (EU) № 543/2011<sup>5</sup>)**

<b>Minimum requirements</b>	
For all classes, subject to special provisions for each class	<ul style="list-style-type: none"> <li>– are undamaged;</li> <li>–benign (a product subject to decay or deterioration that makes it unfit for consumption is not allowed);</li> <li>–practically free from damage caused by insect pests;</li> <li>–free of foreign odours and/or taste;</li> <li>–practically free of insect pests;</li> <li>–without serious vitreousness, except for varieties marked with the letter "V" in the list of varieties;</li> <li>–without high surface moisture content</li> </ul>
Maturity requirements	<p>Fresh apples must be sufficiently developed and have a satisfactory degree of maturity.</p> <p>The development and state of maturity of apples must be such that they can continue the ripening process and reach the required degree of ripeness according to the variety characteristics.</p> <p>Several parameters (e.g. morphological aspect, firmness, taste and refractive index) can be considered to check the minimum requirements for apple maturity.</p>

If a food product is included in the list of organic products, it must comply with the EU rules established by Council Regulation (EC) № 834/2007 (OJ L-189, 20.07.2007). These rules cover the following aspects:

- production, packaging, processing, transport and storage of products;
- use of certain products and substances in the food industry;
- prohibition of the use of genetically modified organisms and products made from GMOs in organic production;
- European Union organic logo: [https://ec.europa.eu/agriculture/organic/downloads/logo\\_en](https://ec.europa.eu/agriculture/organic/downloads/logo_en);
- verification measures and the specific control scheme to be applied to such products by the designated authorities in the partner countries.

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<sup>5</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/pxftq> (дата звернення 16 лютого 2024 року). С. 17-19.

As for third countries, inspections can be carried out by any accredited certification and control bodies, including those in Ukraine (although many other bodies in other countries can also carry out inspections in Ukraine).

Regulatory requirements for fresh apples:

ensuring compliance of fresh produce with EU requirements through testing;

requirements for contaminants and microbiological criteria set maximum permissible levels of cadmium, lead, salmonella, listeria and E. coli;

levels of pesticide residues depend on the chemical composition of the pesticides used, and limits are set accordingly;

for fresh apples, clear market standards are set for quality, varieties and sizes that must be adhered to.

Table 3

**Identification of apples according to market requirements  
in export-import operations (part B of Annex I of Commission  
Implementing Regulation (EU) No 543/2011)<sup>6</sup>**

Requirement	Characteristics
Appearance	<ul style="list-style-type: none"> <li>– are intact;</li> <li>– benign (without rotting or deterioration that makes them unfit for consumption and is not allowed);</li> <li>– practically free from damage caused by insect pests;</li> <li>– free of foreign odours and flavours;</li> <li>– without significant glassiness;</li> <li>– without high surface moisture content;</li> </ul>
Maturity	<p>Apples are sufficiently developed and have a satisfactory degree of maturity.</p> <p>The development and state of maturity of the apples is such that they can <u>continue the ripening process and reach the required degree of ripeness.</u></p>
Class	<p>Apples meet the characteristics of the variety and have an intact stem. They have the following minimum surface area colour characteristic of the variety:</p> <p>– 3/4 of the total surface area is red in the case of colour group A, The flesh of the apple fruit is flawless.</p> <p>The following minor defects are allowed, which do not spoil the appearance, do not affect the quality, shelf life and presentation of apples in the package</p> <ul style="list-style-type: none"> <li>– minor skin defects,</li> <li>– minor browning of the surface, such as</li> <li>– brown spots that do not extend beyond the stem cavity, but without rustling.</li> </ul>
Presentable condition	<p>Apples are packed in a manner that ensures their proper preservation. Packs weighing more than 3 kg are sufficiently rigid to ensure proper preservation of the product.</p> <p>The packaging materials used inside the container are clean and prevent possible external or internal damage to the product.</p> <p>The labels, which are applied directly to the product, do not leave any traces of glue or skin defects after removal.</p> <p>The packaging does not contain any foreign substances.</p>

<sup>6</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/rxftq> (дата звернення 16 лютого 2024 року). С. 21-22.

Between 20 and 40 varieties of apples are traded internationally. The most popular apple varieties available on the European Union market are as follows: Golden; Champion; Boskoop; Fuji; Braeburn; Cox; Elstar; Gala; Granny; Idared; Red; Jonagold.

Table 4 summarises the market requirements for the minimum size of fresh apples to be indicated on the packaging.

Table 4

**Minimum size of apples determined by maximum diameter or weight**

Requirements for apples calibrated by diameter	Requirements for apples calibrated by weight
<p>The minimum calibre of apples shall be 60 mm when measured by diameter.                      For the purpose of ensuring uniformity in size, the difference in size between products of the same package shall not exceed                      – 5 mm for Extra class fruit and for first and second class fruit packed in rows or layers.                      For apples of the Bramley's Seedling (Bramley, Triomphe de Kiel) and Horneburger varieties, the difference in diameter may reach 10 mm, and                      – 10 mm for first class fruit, in commercial packaging or in bulk in packaging.                      For Bramley's Seedling (Bramley, Triomphe de Kiel) and Horneburger apples, the difference in diameter can be up to 20 mm.</p>	<p>The minimum calibre of fruit must be 90 g if determined by weight.                      There are no requirements for the calibration of second class fruit in commercial packaging or in bulk in packaging.                      The minimum size requirements do not apply to varieties of small-fruited apples marked "M". Such small-fruited varieties must meet the minimum level on the Brix scale of 12.</p>

**2. Customs clearance of fresh apples**

Access to the European market for fresh fruit involves crossing borders and undergoing a number of checks and procedures, including:<sup>7</sup>

- import duties (tariffs and similar charges paid by importers);
- customs border crossing procedures;
- document checks and investigations.

This section provides rules and procedures for the movement of fresh fruit into the EU, which is important practical knowledge for deliveries to EU customers.

While tariffs and similar customs duties are paid by importers, they affect the competitiveness of Ukrainian exporters against both EU producers and current fruit suppliers from other countries (depending on the customs restrictions that apply). It differs from the value added tax, as it is paid equally

<sup>7</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проєкт «Агроторгівля України» <http://surl.li/rxfqtq> (дата звернення 16 лютого 2024 року). С. 11.



by both local producers and all importers. Table 5 shows the customs requirements for imports of fresh apples from all countries that do not have preferential trade agreements (third country tariff), Ukraine and Chile, New Zealand and South Africa (the main suppliers of fresh fruit to the EU).

Table 5

**Customs requirements for the import of fresh apples from countries without preferential agreements**

HS code	Description	Third country tariff	Rate applicable to Ukraine	Rate applicable to the largest suppliers of the product to the EU	
<b>The tariff changes during the year</b>					
0808 10 80 20 0808 10 80 90	Fuji apples Others	January – March	Min. entry price + 4.8% (in 2021)	Min. entry price + 0%	Chile: Min. entry price + 0%; New Zealand, South Africa: Third country tariff applies
		April – July	Min. entry price + 0% (in 2021)		
		August – December	Min. entry price + 8,0% (in 2020)		

Fresh apples are subject to entry price regulation in the EU, so that if the CIF price is lower than the entry price, a progressive duty rate is applied to increase the price to at least the entry price level (entry prices are calculated based on average wholesale prices in Europe and are changed and published every two weeks. In April 2021, the minimum entry price for fresh apples was EUR 56.80 per 100 kg. Any supply of goods at a lower price is subject to a price increase levy.

Exports from Ukraine, New Zealand, Chile and South Africa are subject to entry price rather than ad valorem duties. If no price is set for fresh apples at the border, the Commission sets a standard import value (SIV), which is determined in the context of the entry price system in accordance with Article 75 of Commission Delegated Regulation (EU) 2017/891 and Article 38 of Commission Implementing Regulation (EU) 2017/892.

In order to benefit from preferential market access, the rule of origin is applied. For apples from Ukraine, the rule of origin must meet the criterion of "fully produced", i.e. grown in Ukraine. Since Ukraine is a signatory to the Regional Convention on Pan-Euro-Mediterranean Preferential Rules of Origin, all fresh produce can be considered to originate in Ukraine if it is purchased in the EU or in other member states of the Convention with which Ukraine has concluded a free trade agreement (including Moldova and EFTA countries).

Control of fresh produce is a serious issue and is carried out at the border to ensure compliance with EU requirements. As for fresh apples, in case of violations at the border, the goods are detained <sup>8</sup>; for example, the movement of products across the border was denied due to the detection of: unauthorized coating agents on fresh apples from Chile (2021)<sup>9</sup>.

In 2020, a consignment of Golden Delicious apples from Poland to the Netherlands was denied internal movement within the EU due to exceeding the permissible level of chlorpyrifos (0.065 mg/kg md). In 2021, a consignment of apples from Poland to Estonia was detained due to the content of carbendazim (0.016 mg/kg – md). Therefore, it should be noted that the EU requirements and procedures at the border should be taken seriously and all requirements should be met (with confirmation that they are met) to ensure the continued unimpeded movement of goods and minimize the costs incurred.

The movement of fresh fruit across the European border requires customs clearance, including sanitary and phytosanitary controls. For most plant-based products, documentary verification is sufficient, and consignments are inspected selectively based on a risk assessment. This may involve additional documentary checks (reviewing the examination results accompanying the consignment) or a full examination of fresh produce samples. The costs associated with these inspections, as well as with the delay in the import of fresh produce, are borne by the exporter, so the fewer inspections the better. At the same time, the EU takes border controls on fresh food safety seriously. Ukraine has not had any consignments of apples banned and destroyed at the EU border due to non-compliance.

This export history is worth continuing, as the measures related to the detection and detention of fresh produce at the border are carried out at the expense of the exporter and the EU does not provide compensation.

As for specific high-risk fresh produce or produce from countries with a history of border detentions, the EU requires all exporters of such produce to cross a designated border control point and sets the frequency of inspections. Fresh produce can only be imported into the EU through a BCP where there are conditions for conducting product-specific tests. Such a control point may be located off the designated route, which may result in extra transport costs<sup>10</sup>.

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<sup>8</sup> Експорт плодів та горіхів до ЄС: перші кроки // Агробізнес сьогодні. URL: <https://agro-business.com.ua/agrobusiness/item/10213-eksport-plodiv-ta-horikhiv-do-yes-pershi-kroku.html> (дата звернення 18 лютого 2024 року). С. 12-14.

<sup>9</sup> Резнік Н., Боштан А. Особливості здійснення митного контролю в Україні у період війни. *Молодий вчений*. 2022. № 11 (111). <https://molodyivchenyi.ua/index.php/journal/article/view/5648> (дата звернення 17 лютого 2024 року).

<sup>10</sup> Резнік Н., Боштан А. Особливості здійснення митного контролю в Україні у період війни. *Молодий вчений*. 2022. № 11 (111). <https://molodyivchenyi.ua/index.php/journal/article/view/5648> (дата звернення 17 лютого 2024 року).

In general, all fresh apples are not considered high-risk products, so a border control point is not required. In addition, Ukrainian fresh apples are not currently identified as a risk factor, so such fresh goods can cross any border. However, in case of constant refusals to allow fresh goods to cross the customs border, the situation may change (for example, Georgian hazelnuts received about 8-10 refusals, and now all hazelnuts and hazelnut products must cross the border through a control point, and 50% of the goods are tested, while the other 50% are documented).

At the EU border, documentation is checked, so it is important for the carrier to have the necessary documents. In addition to these requirements, the inspection of fresh produce (sanitary and phytosanitary control) involves, first and foremost, a review of the available documentation so that all documents confirming the conformity of fresh produce are available in the event of additional or spot checks of the produce (e.g. if the fresh produce is checked for contaminants, a certificate issued by the competent authority may be accepted without the need or cost of further examination. It is in the interest of the exporter to ensure that conformity can be easily proven.

EU customs authorities require the following commercial documentation at the customs border <sup>11</sup>:

- invoice;
- declaration of customs value;
- documents confirming cargo insurance;
- shipping documents;
- Single Administrative Document (SAD);
- packing list.

In order to benefit from preferential market access, fresh apples exported abroad must have a EUR1 certificate of origin, which is issued for each batch during or after export. However, the issuance of the EUR1 certificate is not required if :

- the total value of the consignment of fresh produce originating in Ukraine does not exceed EUR 6,000.00 according to the invoice (in order to obtain preferences in the EU countries, the exporter independently declares the origin of the goods from Ukraine in the declaration of origin);
- the exporter of the goods has the status of an authorized (approved) operator;
- in the EU countries, goods are taxed at a zero rate of import duty according to the Customs Tariff (except for the provisions of the Rules of Origin on cumulation and quotas).

EUR1 certificates of origin are issued for goods exported to the EU countries that comply with the rules of origin applicable under the DCFTA.

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<sup>11</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/rxftq> (дата звернення 16 лютого 2024 року). С. 13.

Subject to the acceptance of EUR1 certificates of origin by the customs authorities of the EU countries, the products of Ukrainian origin are exempt from all customs duties. Such a certificate is valid for four months.

The rules for the control of fresh fruit imports in the European Union set out in Regulation 2017/625 (Official Control Regulation) allow national competent authorities in third countries to exercise official control over all operators by issuing official certificates. The Phytosanitary Certificate (on plant health) for fresh fruit and vegetables issued by the national competent authority ensures that market operators comply with the requirements of Regulation (EU) 2017/625.

EU border controls are carried out through documentary checks, which may also require thorough document checks and inspections at border control points.

The national competent authority in Ukraine for issuing phytosanitary certificates is the regional department of the State Service of Ukraine for Food Safety and Consumer Protection. In the case of fresh apples, it is based on entomological (pests) and mycological (fungal pathogens) analysis.

The TRACES system, managed by the European Commission, is an online platform for streamlining the sanitary and phytosanitary certification and verification process by uploading documents prior to arrival at the border, enabling a fully digital and paperless workflow.

Verification of the goods at the border is carried out by checking the original document of the organic certificate of inspection by a recognized certification body issued for the relevant authority of the Member State. Such a certificate can also be uploaded to the TRACES system.

During 2020-2021, there was an increase in imports of fresh fruit to Ukraine. In 2021, almost 1 million tones of various fruits were imported to Ukraine, which is 8% more than in 2020 and a historical high. However, according to the first half of 2022, there was an increase in imports of fresh fruit and vegetables, so there is a possibility of a new record.

Customs clearance of fresh fruit must be completed as soon as possible, as these are perishable goods, so their spoilage and downtime at border crossing points is simply unacceptable and can cause significant losses to the supplier.

First of all, when customs clearing vegetables and fruits, you need <sup>12</sup>:

- certificate of origin (provided by the manufacturer);
- phytosanitary certificate (provided by the manufacturer);
- certificate of quality (provided by the manufacturer);
- labelling in Ukrainian;
- invoice (invoice, packing list (specification));

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<sup>12</sup> Резнік Н., Вербівський С.В. Митне регулювання логістичних процесів в умовах цифровізації. *Молодий вчений*. 2022. № 12 (112). <https://molodyivchenyi.ua/index.php/journal/article/view/5678/5555> (дата звернення 17 лютого 2024 року).

- foreign economic agreement (contract) with amendments and additions to it;
- transport documents (depending on the type of vehicle): TIR Carnet, CMR, Bill of lading, B/L (bill of lading), AWB, Postal waybills (TNT, DHL, UPS, TMM);
- documents confirming the cost of delivery to the border of Ukraine (required depending on the terms of delivery of goods in accordance with the Incoterms rules): certificate of the cost of transportation, contract for the carriage of goods, invoice for the provision of freight forwarding services.

During the phytosanitary control of fresh fruit at border checkpoints, samples are taken for examination, after which certificates are issued confirming that the quality of the products meets the requirements of the standards. If the examination reveals that the products are contaminated, the entire batch is destroyed by the phytosanitary service.

The customs clearance of imports follows the following procedure <sup>13</sup>:

1. The consignment of fresh fruit arrives at the customs terminal, where samples are taken for phytosanitary control. If no infection is detected, the customs clearance of fresh fruit continues with the submission of a declaration.

2. The next stage is the control of fresh fruit on the basis of a Health Certificate, which comes with the consignment from the exporting country, or on the basis of a test report, which is made in Ukraine.

3. The next step is to calculate the customs value of fruit imports. The duty on fresh fruit is calculated on a case-by-case basis, but always includes 20% VAT on the value of the consignment, including transport costs.

4. After customs clearance of fresh fruit and payment of customs duties, the truck can leave the terminal and move to the warehouse.

It should be remembered that it is necessary to indicate the exact net weight of the goods, as fresh fruit may deteriorate, dry out or gain moisture on the way. This can lead to questions at customs.

Exporting fresh fruit to the EU requires producers to go through a complex process and obtain a number of permits. It is also necessary to comply with the requirements and rules that guarantee safety.

## CONCLUSIONS

The classification of fruits is based on their structure and natural and climatic zones of cultivation. In today's market environment, the requirements for the quality of fresh fruit have increased significantly. Along with the criteria of size, attractive appearance, and balance of sugars and acids, an important property of fresh fruit is the optimal content of biologically active

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<sup>13</sup> Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/rxfiq> (дата звернення 16 лютого 2024 року). С. 14.

substances. The quality of fresh fruit is shaped by the specific climatic conditions of cultivation and is determined by agricultural practices.

Imports of fresh apples from Ukraine to the EU amount to EUR 523 million per year and show a slight decrease of 1.4%. Average import prices are EUR 0.82 per kg. The UK and the Netherlands account for almost 2/3 of fresh apple imports. The highest import prices are observed in Belgium and the Netherlands. The largest competitors in imports to the EU are Chile, New Zealand and South Africa (providing 86% of imports to the EU).

Contaminant requirements and microbiological criteria set maximum permissible levels of lead, cadmium, salmonella, listeria and E. Coli. The levels of pesticide residues depend on the chemical composition of the pesticides used. For apples, there are clear market standards for quality, variety and size that must be met.

For fresh apples in export-import operations, clear market standards have been established for quality, varieties and sizes that market participants must adhere to. Apple exporters should load and pack products in accordance with industry best practices to protect the product during transport and storage. Retail and wholesale package sizes must comply with standardised pallet loading requirements set by the retailer.

Both marketing and protective packaging must comply with EU requirements for food contact materials, sanitary and phytosanitary requirements, and waste management (while the packaging manufacturer is responsible, the exporter must ensure compliance, as shipments with inappropriate packaging may be detained and rejected at the border).

Labels should contain mandatory information and most retailers expect standardisation of barcodes (GS1) and Global Trade Item Numbers (GTINs).

The use of certain protected names (geographical indications) for apples is prohibited and should never be used.

If sold at the minimum entry price, Ukrainian exports will be subject to a zero import duty rate. Ukraine has seasonal tariff advantages over its main competitors (South Africa and New Zealand), except for Chile. Fresh apples can be transported through any EU border crossing. A phytosanitary certificate issued by the State Service of Ukraine for Food Safety and Consumer Protection is required for each truck or container.

## SUMMARY

The article explores the classification of fruits based on their structure and the natural and climatic zones of cultivation, with a focus on the increased quality standards demanded by today's market environment. It discusses the significance of factors such as size, appearance, sugar-acid balance, and the content of biologically active substances in fresh fruit quality. Specifically, it delves into the import of fresh apples from Ukraine to the EU, noting trends, average prices, and key importing countries. Moreover, it addresses the regulatory framework governing contaminants, microbiological criteria, and pesticide residues in fresh fruit imports.

The article emphasizes the necessity for adherence to market standards regarding quality, variety, size, and packaging in export-import operations. It underscores the importance of following industry best practices in loading, packing, and labeling to ensure product integrity during transportation and storage. Compliance with EU regulations concerning food contact materials, sanitary measures, phytosanitary requirements, and waste management is highlighted as crucial for successful export transactions. Additionally, it touches upon tariff advantages and phytosanitary certification requirements for Ukrainian apple exports to the EU.

Overall, the article provides a comprehensive overview of the factors influencing the quality and export of fresh apples from Ukraine to the EU, while also addressing the regulatory, logistical, and market considerations essential for exporters to navigate successfully in the international fruit trade.

### **Bibliography**

1. Практичний довідник з експорту свіжих фруктів та овочів до Європейського союзу // Проект «Агроторгівля України» <http://surl.li/pxftq> (дата звернення 16 лютого 2024 року).

2. Експорт плодів та горіхів до ЄС: перші кроки // Агробізнес сьогодні. URL: <https://agro-business.com.ua/agrobusiness/item/10213-eksport-plodiv-ta-horikhiv-do-yes-pershi-kroky.html> (дата звернення 18 лютого 2024 року).

3. Резнік Н., Боштан А. Особливості здійснення митного контролю в Україні у період війни. *Молодий вчений*. 2022. № 11 (111). <https://molodyvchenyi.ua/index.php/journal/article/view/5648> (дата звернення 17 лютого 2024 року).

4. Резнік Н., Вербівський С.В. Митне регулювання логістичних процесів в умовах цифровізації. *Молодий вчений*. 2022. № 12 (112). <https://molodyvchenyi.ua/index.php/journal/article/view/5678/5555> (дата звернення 17 лютого 2024 року).

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