## State control system in hop processing

Over the past centuries, it has proved absolutely necessary to protect our Czech hops against attempts at adulteration. The role of state authority in this process is irreplaceable and directly required by the private sector. It is evident in the following stages of hop processing:

- Cooperation with hop producers ÚKZÚZ keeps records of hop fields in a register, assigns registration numbers to the hop fields and checks their use. ÚKZÚZ keeps records of hop producers, decides on the transfer of a hop field to another producer, methodically guides and checks the marking of hops done by the producer including the records of marking labels and the summarisation of the total hop harvest.
- Trade in hops verifying the guality and origin of hops, supervising the processing of hops, issuing certificates for hops put on the market.
- The key role of the state certificates issued by the state authority serve in foreign trade as a guarantee of the quality of the purchased product.

Trade in hops has a very positive impact on balance of trade and reduces the negative balance of agricultural foreign trade of the Czech Republic. The credibility of the current method of hop certification in our country also contributes significantly to that.

The Czech Republic has introduced in 2022, as the first country in the world, hop marking according to the system adopted at a meeting of the International Hop Growers' Convention (IHGC). The mentioned system is based on the use of three-character codes for international marking of hop varieties and three-character codes for the country and hop-growing area (producing district). The main purpose of using these codes is a quick identification of the variety and its origin.





### Did you know that...



- in 2021, hop plants were grown on 4 971 ha in the Czech Republic by 121 growers in 191 cadastres;
- in 2021, 8 306 tonnes of hops were harvested here;
- hops is grown in three hop-growing areas Žatecko, Úštěcko and Tršicko;
- in 1929, former the Czechoslovak Republic was the biggest hop producer in the world (with 17264 ha):
- in 2021, the Czech Republic was the biggest producer of fine aromatic hops in the world, the second biggest producer in the EU and the third biggest hop-growing country in the world;
- the biggest buyers of Czech hops are Japan, Germany and China;
- based on Commission Regulation No 503/2007 of 8 May 2007, the designation ŽATECKÝ CHMEL (PDO) was entered into the Register of Protected Designations of Origin and Protected Geographical Indications; since 1 January 2017, ÚKZÚZ has been checking compliance with the specification according to the relevant Act;
- hops trellis is 7.5 m high; 3 333 hop plants are needed per 1 ha;
- 3–4 cones of Žatec hops are needed for one pint (half-litre) of beer;
- according to the IHGC, the world hop-growing area in 2021 was 61 553 ha and 105833 tonnes of hops were harvested.



# **Contact and detailed information:**

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Weiahina of verified hops

Verification mark

12-2022

# **V**CENTRAL INSTITUTE FOR SUPERVISING AND TESTING IN AGRICULTURE

# HOP CERTIFICATION



In the Czech Republic the hop certification is traditionally carried out by the Central Institute for Supervising and Testing in Agriculture (ÚKZÚZ). The state thus guarantees the origin and guality of hops to national and foreign buyers. This activity is stipulated by Act on hops protection (No 97/1996 Coll.), as amended.

Certification includes hop marking by the producer and verification of guality and origin by the Institute.

Certified are only hops from hop-growing areas that meets EU guality requirements and hop products made from this hops.

■ The Ministry of Agriculture of the Czech Republic is the competent authority responsible for supervising compliance with the process of certification.

Hop field, chateau Stekník

The existing method of certification has a positive impact on foreign trade in hops (75-80% of hop production is exported, of which 60% to Asian markets).

In foreign trade, customers require certificates issued by a state authority as a guarantee of the guality of the product purchased.

Another benefit of the current method of hop certification is product traceability, which is increasingly emphasized throughout the food chain.

# **Process of certification – Marking**

It is carried out by the hop grower himself, but under the methodical guidance and control of ÚKZÚZ.

### Producer

- applies to the Institute for the issue of marking labels:
- marks individual packages of hops with marking labels;
- weighs the hop package and enters it electronically into the Farmer Portal in the form of a 'Producer's Declaration', which is a document with the number and weight of the labelled hop packages by cadastral area and hop variety;
- returns unused marking labels to the Institute by 30 November of the relevant year at the latest.



Sealing pliers, seal, verification material

# ÚKZÚZ

- issues to the grower the necessary number of marking labels for the estimated hop harvest on the basis of the application and own records in the Hop Field Register;
- keeps full records of marking labels issued and returned;
- summarises the guantity of hops harvested in the Czech Republic;
- checks and compares the quantity of hops harvested with the area of hop fields planted by the grower.

The document with the number and weight of the marked packages by cadastral area and hop variety accompanies each lot of hops throughout its processing until the issue of the certificate.





Official self-adhesive seal

Seal on the packaging with hops

# ... Verification, in general

Verification shall be initiated on the basis of a submitted Application for hop verification. The application must include:

- Iaboratory results on compliance with the parameters of moisture, hop and non-hop admixtures and seed content:
- individual Producer's Declarations or a list of packaging for which a verification is requested.

### In terms of the method, verification can be divided into:

- verification of hops at the verification centre. Output hop products granules (73 %) or pressed hops (4%);
- verification of hops in producer's packaging (22 %);
- verification of hops from foreign countries (EU countries) or from third countries (1 %).

### For the purpose of verifying hops and hop products, the Institute shall:

- a) check the completeness of the information in the application for verification of hops and hop products:
- b) check the origin of hops according to the labels and check the hop products according to the verification mark and the weighing document;
- c) remove the labels, marks from packaging;
- d) supervise the hop processing and the processing of hop products;
- e) seal of packaging with hops and hop products;
- f) mark the hop packaging with a verification mark and other mandatory data;
- g) determine the weight, issue a weighing document and a certificate.



Transport of hops from producers



Verification of pressed hops

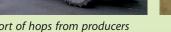
# ... Verification, in practice - at verification centre



Verification of granulated hops

# Hop inspector at hop output

and the year of harvest.





### Hop inspector at hop input

checks the completeness of the information in the documents or in the electronic programme and on the hop packaging;

- removes the marking labels from the individual packages:
- registers the numbers of marking labels in hop input document;
- electronically reads (scans) the marking labels using barcodes;

physically verifies the quality of hops. Hops which is mouldy, hot and moist, severely damaged by diseases, pests or mixed with other objects may not be verified, and, at the same time, only hops which is part of an approved Application for hop verification may be verified.



Certificate for a certified product

continuously supervises the actual technological process (e.g. whether hops hasn't been added or removed, or even mixed with other hops);

- weighs the product after the hop processing;
- affixes the verification marks with mandatory data on the packaging and self-adhesive seals with security features;
- marks the hop packaging with an indication of whether hops is treated or untreated;
- issues weighing document, on the basis of which another employee of the Institute, after checking them, completes the certificate (Certificate for a certified product).
- Hop inspectors are present continuously during the entire process of hop processing to ensure that the declared origin matches with actual hop input and hop processing. This supervision also guarantees the origin of hops, the hop-growing area, the variety
- The whole certification process is completed by the issue of a certificate ("Certificate for a certified product") for the specified checked quantity of hops or by the refusal of certification. An appeal by the grower against the refusal of certification is handled pursuant the Administative Procedure Code.