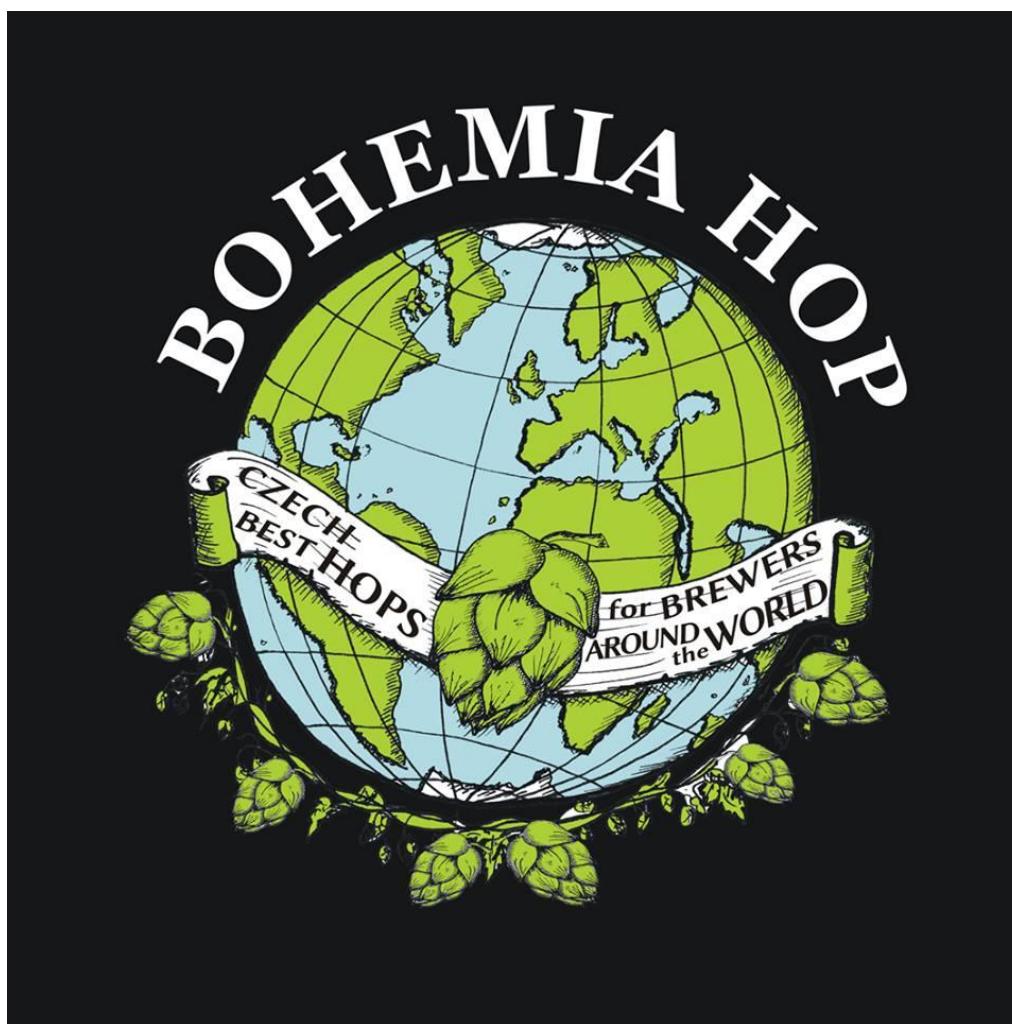


## *Applications of Czech Hop Varieties in Brewing*

*23rd Year of the Conference – June 23, 2021, Žatec*



## Introduction

Bohemia Hop (BH) together with the Hop Research Institute (HRI) organized the 23rd year of a traditional seminar focused on the use of Czech hops varieties in brewing. This year's seminar, which took place on the grounds of HRI on 23<sup>rd</sup> June, was a bit specific. After a one-year break that was forced by an epidemiological measure in response to Covid-19, it was one of the first professional and social events from the brewing environment which we could organize. Participants appreciated the opportunity to meet other brewers and practitioners after a long time and to discuss their experiences. In addition to the tasting of prepared beers from the Experimental Brewery of the HRI, brewed by the brew-master Jan Hervert, the 2nd year of the Kazbek Cup 2021 tasting competition took place, during which participants evaluated the samples sent to the competition.

The introductory speech was given by Zdeněk Rosa, Chairman of the Board of BH and Josef Patzak, director of HRI. These two institutions covered the whole event. Zdeněk Rosa acquainted the participants with the development of hop acreage in the Czech Republic in 2021 and with the activities of Bohemia Hop in the last year.



## Lectures and Tastings

Another presentation was given by Vladimír Nesvadba (HRI), who brought new knowledge from the field of breeding and registration of new Czech hop varieties. This lecture was complemented by the first tasting, in which beers brewed from newly registered Czech fine aroma varieties from the "Saaz" series were prepared for use in the production of beers with the trademark "Czech Beer".

### New varieties from the "Saaz" series

For the presentation of individual varieties and the presentation of their characteristic properties in beer, beer samples hopped always with only one specific variety (so-called single-hopped) were prepared. For these purposes, beers from the varieties - Saaz Shine, Saaz Comfort, Saaz Brilliant and Saaz Late - were brewed.

Sample	°Plato	IBU	Evaluation	Placings
Saaz Shine	12,1	33	2,23	2
Saaz Comfort	12,1	36	2,27	3
Saaz Late	12,2	37	2,98	4
Saaz Brilliant	12,1	32	2,18	1

Note: Hopping – hop brew + whirlpool

### New products and their use - Example study „New England IPA Kazbek PE 45 vs. Kazbek PE 90 "



In another lecture, Michal Havrda from the Pioneer Beer Brewery introduced the participants to the new hop products, which have found their application more abroad. He then demonstrated his practical experience on the use of Kazbek variety in the form of enriched pellets type PE 45 from Bohemia Hop processed in CHMELAŘSTVÍ, družstvo Žatec which he uses for cold hops in the production of his very well-rated beers. In his presentation, he first focused on qualitative differences. As the main, he mentioned the bitterness, which is sensory cleaner and less adherent, as well as the reduction of colloidal turbidity due to reduction of polyphenols content and promotion of fruit aroma at the expense of reduction of grassy and earthy tones. He emphasized as the main economic advantages the increase in the content of essential oils and alpha acids and the reduction of beer losses, which - in his case - were 2% lower than the losses when using pellets type PE 90 for dry hopping when dosed to the same content of essential oils (or alpha acids).

His lecture was supported by another round of tasting, where it was possible to compare two samples of NE IPA style beer, in which one sample was hopped only with Kazbek in pellets type PE 90 and the other sample

only with Kazbek in enriched pellets type PE 45. Michal Havrda collaborated on the recipe together with Jan Hervert, who then brewed the beers.

Sample	Alpha <sub>pellets</sub> (EBC 7.5)	°Plato	Hopping I Whirlpool	Hopping II Main Fermentation	Hopping III Lagering	Final Hop Dosage	IBU
Kazbek PE 45	11,50%	14,0	4 g/l	4 g/l	4 g/l	12 g/l	72
Kazbek PE 90	5,22%	14,0	4 g/l	4 g/l	4 g/l	12 g/l	46

It is worth mentioning that pellets type PE 45 were used for dry hopping for the winning beers from both categories of the Kazbek Cup 2021. The main prize thus remained in the hands of Jan Hervert, brewer of the HRI's Experimental Brewery.

### Impacts of the coronavirus crisis in the world and in the town of Žatec and the landscape of Saaz Hops on UNESCO World heritage list

In the second part of the lectures Vladimír Šeretka (BH) described the current market situation, the impact of the coronavirus crisis on the global brewing sector and showed the marketing tools that individual breweries in Japan and the US began to use to adapt to changing customer behaviour. The general trend due to pandemic measures is to focus on beer consumption outside restaurants.

In the last speech, Michal Kovařík from the Hop Growers Union of the Czech Republic briefly described the nomination process of the town of Žatec and the landscape of Saaz Hops on UNESCO World heritage list.

During these two lectures, the elimination and final phase of the Kazbek Cup 2021 tasting competition took place, which determined the winner.

### Current beer trends with the use of Czech hop genotypes



The last round of tasting was focused on current beer trends with the use of new Czech hop genotypes, whose registration process should be completed in late 2021 to early 2022 - ERIS variety was used in New England IPA style, CERES variety in Kveik, PLUTO variety in IPL, SATURN variety in IPA and previously registered varieties BLUES and COUNTRY in RED ALE. As it turned out, these new varieties have great potential for application in other beer styles than those that are traditional for Czech styles.

## Kazbek Cup 2021

At the end of the seminar, the winners of the Kazbek Cup 2021 were announced. 22 samples from 16 breweries entered the competition. The samples were evaluated in two categories - top and bottom fermented beers. As in the last year, the absolute winner was Jan Hervert from the HRI Experimental Brewery, who dominated both categories.



In the category of bottom-fermented beers, also Jan Hervert succeeded with Kazbek IPL beer. The second and third place was won by the Holender Brewery with its Holender 10° Plato, resp. Holender 11° Plato. 12° Remorkér from the Lod' Brewery, R.I.P. from the PanaCzech Brewery and 11° Plato unfiltered lager from the Hradecký Klenot Brewery.

In the category of top-fermented beers, New England IPA Kazbek PE45 beer gained the most popularity, which was very closely followed by 12° Plato Vokno Ale beer from Volt Brewery. Elbrus beer from the Podlesí Brewery came in third. Kazbek Kölsch beers from the CHI Experimental Brewery, Primátor APA from Náchod and APA 11 from the U Tomana Brewery also made it to the final round.

Top-fermented Beer		
Sample	Brewery	Placings
NE IPA Kazbek PE 45	Pokusný pivovar CHI	1
12° Vokno Ale	Pivovar Volt	2
Elbrus	Pivovar Podlesí	3

Bottom-fermented Beer		
Sample	Brewery	Placings
Kazbek IPL	Pokusný pivovar CHI	1
Holender 10°	Pivovar Holender	2
Holender 11°	Pivovar Holender	3

## After-party in Pioneer Brewery

The program ended with a tour of hop yard and a castle on the research farm of the HRI in Stekník and a traditional after-party, which took place in the Pioneer Brewery, where those who remained had the opportunity to taste Czech varieties in various beer styles.

*Goodbye next year in Žatec*