



The story of Kveik – a relic from early domestication

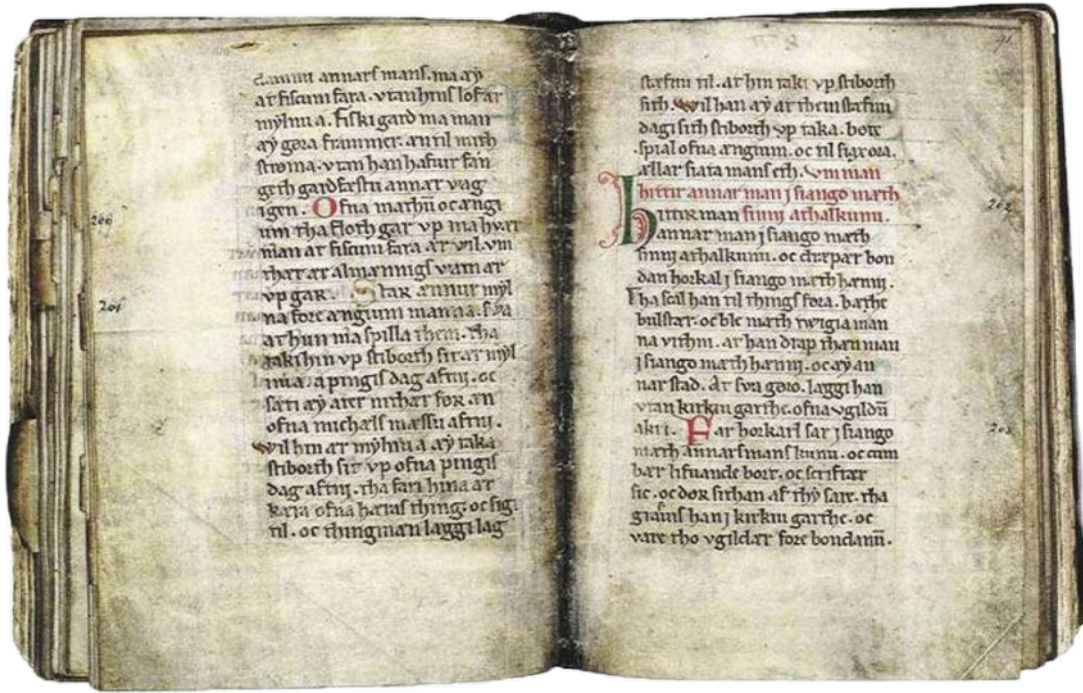
Ex situ Working Group meeting, 6th – 7th May 2025
Athens, Greece

Atle Ove Martinussen, Managing Director at Western Norwegian Cultural Academy, Voss

Hans Geir Eiken, Senior Research Scientist, Norwegian Institute for Bioeconomy Research (NIBIO)

Nina Svartedal, Senior Scientific Adviser, Norwegian Genetic Resource Centre, NIBIO

Brewing as part of the Christianization



The Gulathing Law from 1024 AD

- Beer – or Kveik – was considered a "Drink of God" even before Christianity.
- As part of the Christianization, King Olav the Holy transformed pagan customs into Christian customs to gain power and acceptance from the people.
- In 1024, King Olav the Holy enacted a Christian law stating that farmers were obligated to brew beer twice a year.
- The penalty for not brewing beer could be a fine or losing the farm.
- Norway was Christianized in 1030 AD by King Olav the Holy.

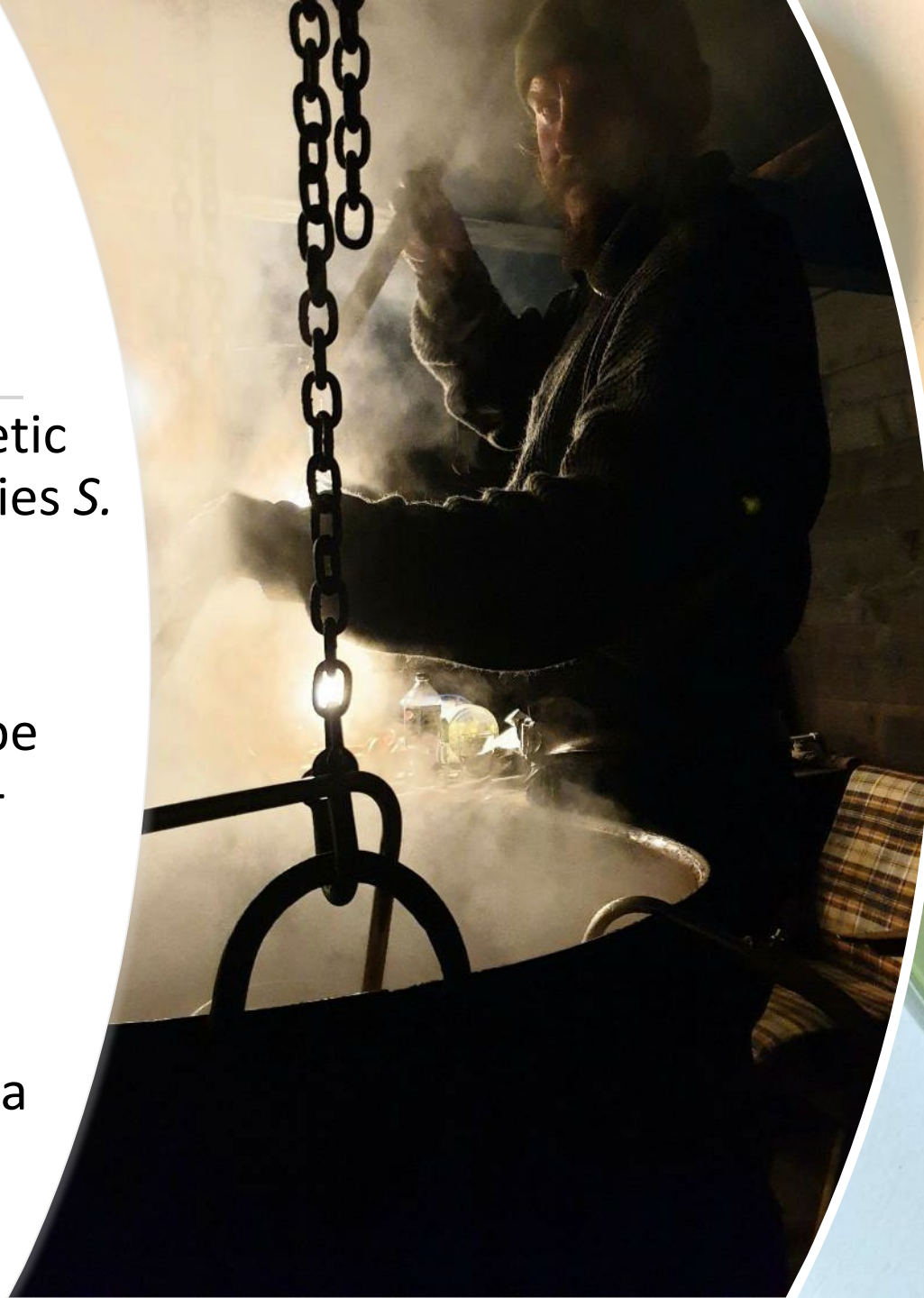
What is brewing?

- Utilizing the yeast *Saccharomyces cerevisiae* for beverage fermentation.
- *Saccharomyces cerevisiae*
 - is an essential component of human civilization.
 - has been used in food and beverage fermentation many thousands of years back in time.



What is Kveik?

- Kveik is a distinct genetic group within the species *S. Cerevisiae*.
- Kveik is estimated to be 4000-8000 years old – close to the root of *S. Cerevisiae*.
- Kveik means “lighting a fire”



The root of *Saccharomyces Cerevisiae*

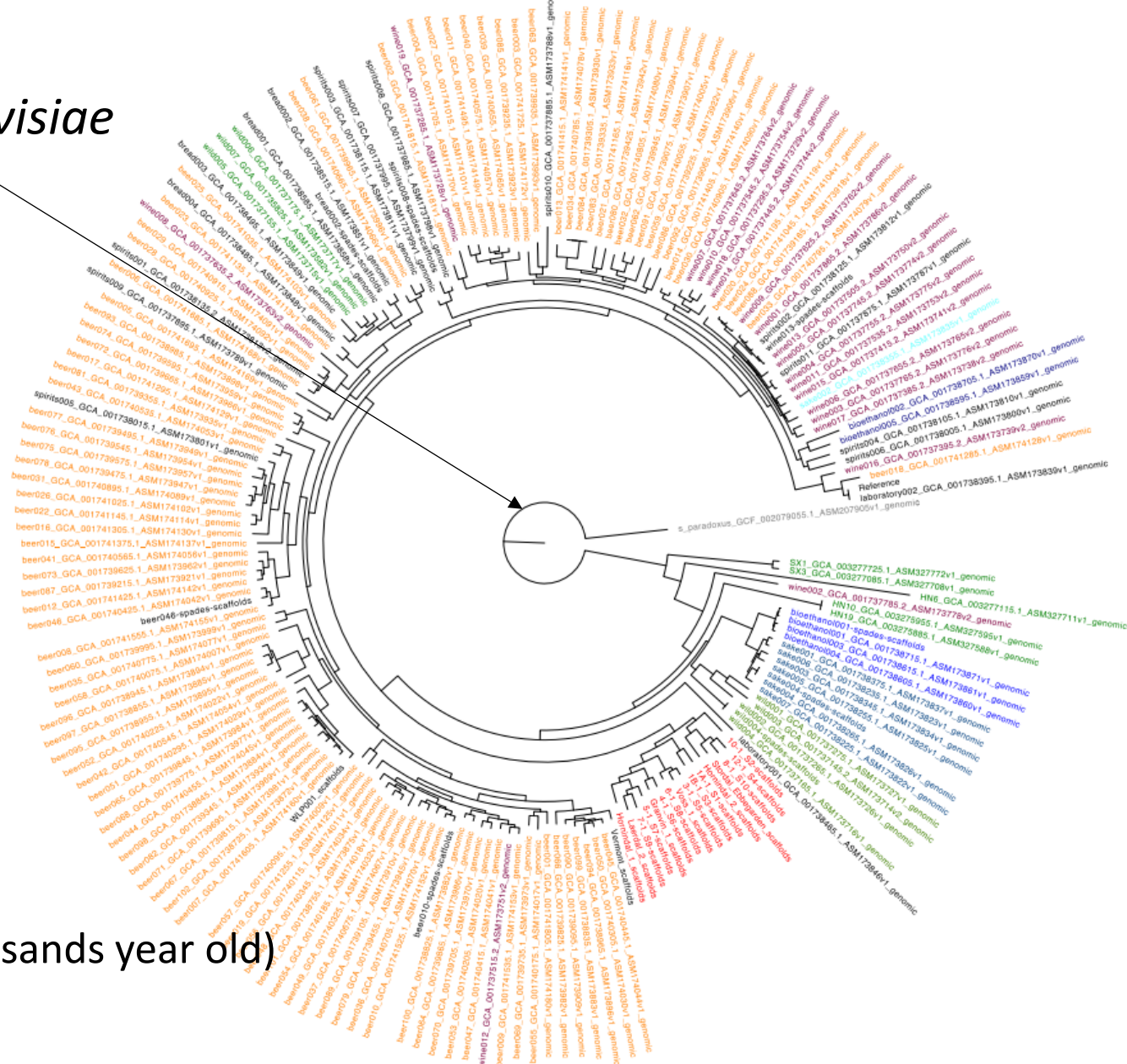
The origin of kveik yeast – phylogenetic tree

Orange: modern beer yeast (300-500 years old)

Blue: sake (nihonshu) yeast (more than 4 000 thousands year old)

Green: wild yeast

Red: kveik yeast



Jan Mayen

Reykjavík

Kveik –

- only found in Norway today

Norway

Finland

Sweden

Helsinki

Tallinn

Stockholm

Estonia

Moscow

Riga

Ireland

Dublin

United Kingdom

Denmark

Copenhagen

Lithuania

Vilnius

Minsk

Belarus



Jan Mayen

Reykjavík

Kveik –

- only found in Norway today

Norway

Finland

Sweden

Stockholm

Ireland

Dublin

United Kingdom

Denmark

Copenhagen

Lithuania

Vilnius

Minsk

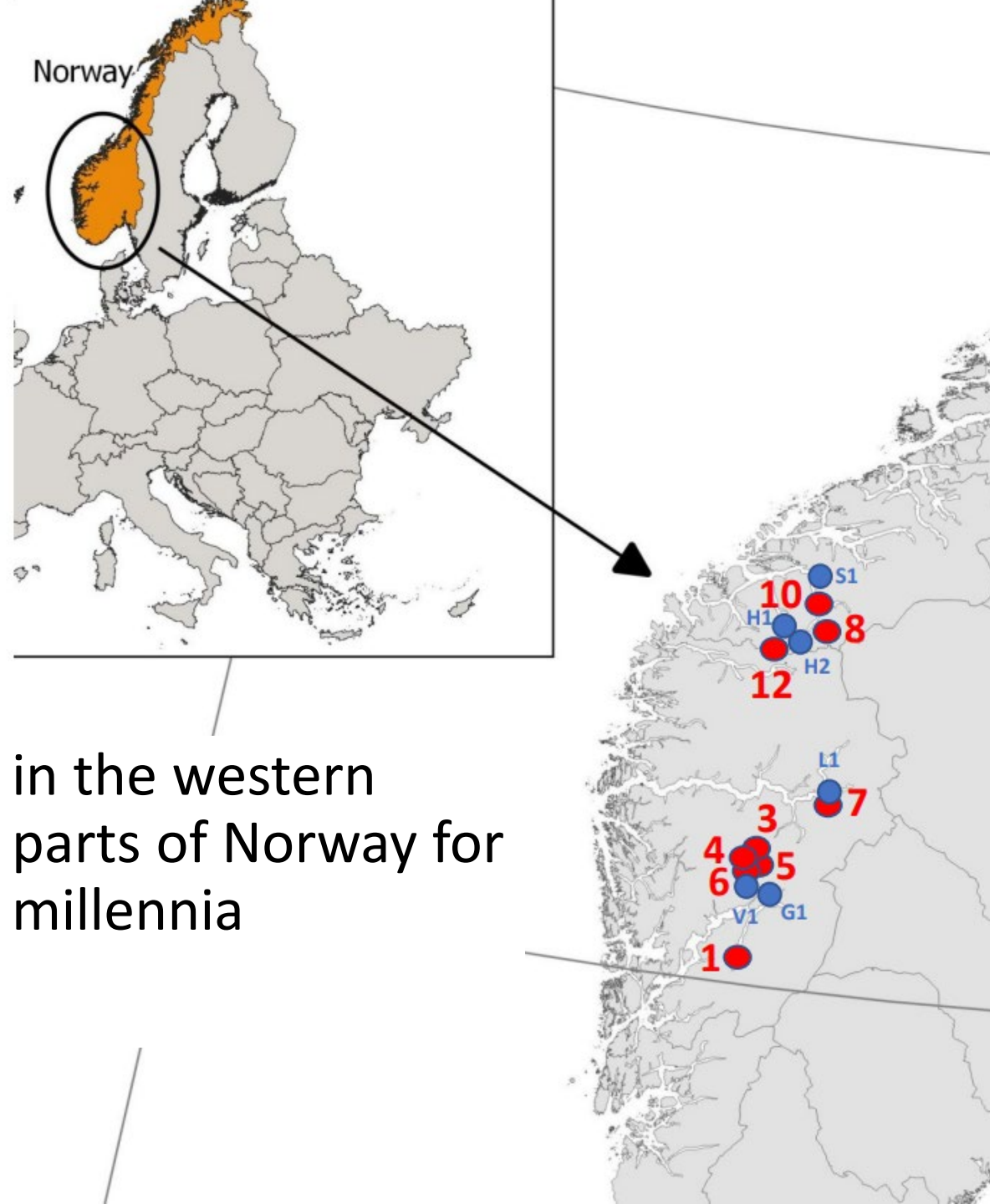
Belarus

Karlstad



Kveik has been kept alive by

traditional
farmhouse
brewing



Characteristics of Kveik beer

| | Kveik | Modern beer |
|------------------------|----------|-------------|
| Fermen- tation temp | 38-40 C | 10-22 C |
| Fermen- tation time | 48 hours | 1-4 weeks |

Kveik is known for having a richer selection of tropical fruit flavours than other types of beer-yeasts



Kveik is a beer with characteristic traits and long traditions.



The hunt for historical
kveik-yeast DNA

New life to old kveik-yeast— is it possible?



Opening of the *Genebank for Kveik* August 2024 in Voss, Norway



- The Kveik is stored in glycerol at -30 C and -80 C
- One back up storage
- Only DNA-sequenced and quality assured Kveik is stored in the gene bank



Only for genebanking?

BREW TODAY ENJOY IN NO TIME

The Only Norwegian Multi-Strain Dry Yeast
A Fast Choice for Flavorful IPA's



**Utilize its
versatility to all
your beers**



**Reduce your
fermentation
time**



**Ability to
ferment at high
temperatures**



**Gives great
depth of flavor
to your beer**

Worth to know about kveik

Brewing beer with kveik yeast has become very popular. Old traditions are being brought back and examined with a fresh perspective using modern methods of analysis.



The ultra traditional Norwegian beer yeast kveik had almost fallen into obscurity. However, kveik beer has now become wildly popular. Photo: Jan Thomas Rosnes © Nofima

LALLEMAND BREWING

LALLEMAND

OPERATED BY  SCOTT
LABORATORIES

Product Search



SHOP

LEARN & EXPLORE

CONNECT

ABOUT US

Home › Shop › Beer Type › Kveik

KVEIK

Kveik is a Norwegian word meaning yeast. In the Norwegian farmhouse tradition, kveik yeast was preserved by drying and passed from generation to generation. Kveik is the original, traditional dr is known for its ability to ferment beer quickly at high temperatures, producing a unique flavor profile with notes of citrus and spice. Kveik yeast has become increasingly popular in recent years du versatility and ease of use, making it a popular choice for brewing various styles of beer, including IPAs, stouts and sours. Kveik yeast strains can also tolerate high levels of alcohol and can produce neutral flavor, allowing the other ingredients in the beer to shine. The LalBrew Voss™ strain of kveik ale yeast supports a wide range of fermentation temperatures, and the flavor profile is consiste the entire temperature range.

Kveik is a worldwide success;
appr 4 300 Kveik beers on the global market today



Activities promoting sustainable use of Kveik

- The gene bank is handing out Kveik yeast to old and new brewers
- Brand building aimed at the local food market and the tourism market.
- Research on utilizing old barley varieties in Kveik brewing



Challenges

- Securing the Kveik gene bank for the future
- More research on the origin of Kveik is needed
- Application to the UNESCO World Heritage Representative List for Intangible Cultural Heritage

Thanks for your attention!



Atle Ove Martinussen, Managing Director at Western Norwegian Cultural Academy, Voss

Hans Geir Eiken, Senior research scientist, Norwegian Institute for Bioeconomy Research (NIBIO)

Nina Svartedal, Senior Scientific Adviser, Norwegian Genetic Resource Centre, NIBIO