

Kveik Yeast - Norwegian Farmhouse Yeast

- Kveik yeast are extremely diverse genetically, presenting characteristics that are not typical in other brewing yeasts
- Why is Kveik Special?
 - Low pitch rates and hotter temperatures are desired. It has a long shelf life and is very hearty. Can be dried for reuse.

Origin

Kveik was passed down from generation to generation within the family, and also shared among fellow brewers in the region. Often stored on “Yeast Rings”. Traditional Kveik strains were family owned and are a combination of a long developed mixed culture of yeast and bacteria

- Lars Marius Garshol - [Larsblog](#)
 - Attributed to the spread of information and yeast strains
 - Over 60+ Yeasts in his registry

Characteristics

- Flavor
 - Can be very clean or with medium esters depending on strain.
 - pH - generally produces a beer with a lower pH than traditional beer yeasts. Increasing the pH in the boil can aid in reducing this effect.
 - “Flaws”: Rubberiness, Tartness, Amplified bitterness

How to use

- Pitch rate
 - 25-75% of normal pitching rates is sufficient. $\frac{3}{4}$ of a teaspoon per 5gal batch.
 - Dried cultures have a cell density of around 9-18 billion cells per gram of dried yeast (Fermentis has around 31 billion cells per gram by comparison), and so pitching as little as 10 grams of dried kveik into 100L of wort is fine. Dried kveik is generally rehydrated in first runnings
 - Ensure proper yeast nutrient, FAN and Oxygenation for maximum yeast health
- Temperature
 - Higher Temps can have a significant effect on the different aromatic and flavor compounds produced by kveik
 - Higher Temps don't seem to have an impact on final gravity
- Fermentation Time
 - Generally only a few days to reach FG, but some have noted that an extra couple days helps with “clean up” of flavors

Storage

- Liquid
 - Should be stored under water or beer and chilled in fridge
- Drying
 - Can be dried on parchment paper or a yeast ring
 - Should be stored in the freezer
 - If under 6 months old, it can be direct pitched, otherwise a starter is recommended.

Commercial Strains

Available from: White Labs, Wyeast, The Yeast Bay, Omega, Imperial, Bootleg Biology, Escarpment Labs

- **Stein Langlo's Stranda**
 - This isolate has a uniquely pleasant fruitiness and an absurdly wide fermentation range, and ferments clean across the entire range. It maintains a stable ester profile.
 - Attributes:
 - Flocculation: Med-High
 - Attenuation: 75-85%
 - Temp Range: 72-98° F
- **Sigmund Gjernes's Voss**
 - It maintains character over a broad temperature range with subtle orange citrus notes that match fruity hops well.
 - Attributes:
 - Flocculation: Medium
 - Attenuation: 75-83%
 - Temp Range: 62-100° F
- **Terje Räftevold's Hornindal**
 - Tropical flavor and aroma of fresh pineapple, mango and tangerine, which complement fruit-forward hops.
 - Attributes:
 - Flocculation: High
 - Attenuation: 75-82%
 - Temp Range: 72-98° F
- **Stordal Framgarden,**
 - A vibrant bouquet of hull melon and cantaloupe esters across a broad temperature range. This strain is well suited to any hop forward or farmhouse-inspired beers.
 - Attributes:
 - Flocculation: Medium
 - Attenuation: 78 - 82%
 - Temperature: 80-95 °F
- **Oslo**
 - Clean, lager-like profile without noticeable off flavors. Bottom fermenter
 - Attributes:
 - Flocculation: Medium
 - Attenuation: 76 - 86%
 - Temperature: 75-98 °F
- **Stordal Midtbust**
 - Cleaner fermentation character and restrained ester profile, allowing the malt and hop character to shine. Perfect for use in any style where malt and/or hop character is at the forefront of the profile.
 - Attributes:
 - Flocculation: Low
 - Attenuation: 76 - 80%
 - Temperature: 75-95 °F
- **Harald Opshaug**
 - Clean characteristics of this strain make it ideal for IPAs and pale ales.
 - Attributes:
 - Flocculation: Medium to High
 - Attenuation: 70 - 80%
 - Temperature: 77 - 95 °F

References

<http://www.milkthefunk.com/wiki/Kveik>

<https://www.garshol.priv.no/download/farmhouse/kveik.html>

Historical Brewing Techniques: The Lost Art of Farmhouse Brewing

By: Lars Marius Garshol

Richard Priess (Escarpment Labs)

By Alan Schafers - For Wichita Homebrewers Organization

