



NovaUCD

Technology Licensing Opportunity



First European Isolates of Yeast Species Used in the Fermentation of Beer Identified

- Potential to generate a unique artisan signature lager with distinct characteristics



Opportunity:

The yeast *Saccharomyces pastorianus* is used worldwide in the annual production of ca. 200 billion litres of lager-type beer. *S. pastorianus* is a hybrid of *Saccharomyces cerevisiae* and *Saccharomyces eubayanus*.

Natural isolates of *S. eubayanus* were first discovered in Patagonia 11 years ago. They have since been isolated in China, Tibet, New Zealand and North America, but not in Europe.

Researchers at University College Dublin have recently identified the first European isolates of *S. eubayanus* from Irish soil. In addition to their use in fermentation, yeasts such as *S. eubayanus* can also produce several organic compounds and enzymes that have a decisive impact on the organoleptic characteristics of beer. These novel Irish-derived strains have therefore the potential to confer unique taste profiles of interest to artisan brewing companies.

Applications:

The identification of novel *S. eubayanus* strains with the potential to develop novel European derived fermented beers either by utilising these strains alone or via hybridization with other yeast strains.

Key Features/Advantages:

- Fermentation with these novel Irish-derived strains could confer unique organoleptic characteristics in the production of artisan beers.

FUNDERS:

Value Proposition:

Potential to generate a unique artisan signature lager with distinct organoleptic characteristics.

Market:

Brewing industry.

Publication:

FEMS Yeast Research

<https://doi.org/10.1093/femsyr/f0ac053>

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