

WE BREW WITH YOU.™



Welcome to the latest edition of the newsletter. If we had been asked in 2019 'what is the biggest threat our industry will face in 2020' the responses would not have included 'coping with the impact of a global pandemic that required the closure of vast numbers of pubs, clubs, and restaurants'. Well, it happened, and with devastating effect. Small craft breweries without the luxury of SKU flexibility needed to switch quickly to alternative income streams and some were hit particularly hard. However, as I write, from my office at AB Vickers in Burton upon Trent, where luckily we have continued operations throughout, I see encouraging signs that the British brewing industry is starting to emerge from the crisis. The phones are ringing with greater frequency and email inboxes are filling – we are bringing employees back from furlough to cope with increasing demand.

This is happening elsewhere around the globe, albeit at different rates depending on the local containment of "the virus" (I shall not speak its name). Having spent 36 years in this industry, witnessing several tumultuous 'industry defining' events, this renewed activity brings a great sense of relief. We may be required to embrace the "new normal" but if this can be done whilst enjoying a pint of cask conditioned British ale in my local pub, in the (relatively) close company of friends and family, then I relish the thought. And so, back to business...

We have so much happening at Lallemand Brewing these days, and we've picked out the best bits to share with you. Collaborations with external partners is in overdrive lately, and we have launched an incredibly exciting new yeast: **WILDBREW™ PHILLY SOUR** is a *Lachancea* species discovered by the brewing scientists at University of the Sciences, Philadelphia, PA USA. This novel strain allows brewers to produce ethanol and lactic acid during fermentation – a great addition to our souring portfolio. In this edition we have included interesting facts and features about **WILDBREW™ PHILLY SOUR**.

A positive to come out of the crisis is the resurgence in home brewing—and we expect that, once bitten, the newbie home brewers will just want to keep on doing it! Is there anything more satisfying than brewing your own golden coloured, deliciously flavoursome brew? You might even want to try and brew your own Kveik, like the 4,800 participants of **the world's largest virtual big brew**.

I hope you enjoy this edition of the **LALLEMAND BREWING** newsletter!

Editorial by Brent Jordan, General Manager, Lallemand Brewing



JULY 24

Online Agraria Workshop

www.agraria.com.br

SEPT. 18 – OCT. 8

WBC Connect 2020

worldbrewingcongress.org

WE BREW WITH YOU™ ONLINE

Lallemand strives to meet customers where they are and, right now, everyone is working digitally. Transitioning from face-to-face seminars, trade shows, and conferences into digital experiences while still providing the WE BREW WITH YOU™ experience. This summer you will find us hosting online live events and participating in virtual trade shows.



SOUR BEER AND PH MANAGEMENT

The world of fermentative microbiology is stunningly diverse. With a broad range of organisms capable of safely fermenting sugars into desirable secondary metabolites, humanity has taken full advantage (whether accidentally or on purpose) of fermentation for as long as we have been storing food. Many of these fermentations would be considered “wild”, relying on the opportunistic inoculation of autochthonous organisms present on the substrate itself or in the environment. Some semblance of control could be exerted based upon seasonal patterns, substrates, and recycling of fermentation products, but ultimately they had a will of their own.

1900s

This changed by the end of the 19th century in part thanks to the seminal work of Niels Hjelte Claussen and Emil Christian Hansen, with the development of the Carlsberg fermentation method for beer production. **By 1904 this method would change the brewing industry forever.** It marked the first time a scientific approach had been taken to fully control an industrial fermentation processes from start to finish. Gone were the days of “spoiled” beers, and the spontaneous drops in pH that heralded mysterious changes in flavor: the era of the industrialized homogenous monoculture beer had begun.

Perhaps out of the monotony, or some ancestral desire to return to more pastoral roots, the idea of large-scale sour and mixed-culture beer production for commercial sale was beginning to drum up significant interest. **By 2007, sour beers were no longer considered a niche product.** Sour and wild beers were experiencing a dramatic rise in popularity proportional to the growth of the craft sector at that time. Older styles such as the acid ales of Belgium and the Berliner Weisse were experiencing a revival – with entire craft breweries popping up dedicated solely to their production.

2000s

This renewed interest in historically and culturally significant ancient beer styles has led to a boom in bioprospecting novel strains for use in the brewery. Today, we have the advantage of highly refined microbiological and genetic techniques to ensure that carefully propagated cultures are used to exacting specifications. Thus, while not truly wild in the same sense as those beers produced 1000 or 10,000 years ago, we are able to mimic ancient conditions in a modern, controlled environment.

While flavor and pH can always be adjusted artificially through the use of food-safe additives, for a vast majority of brewers the crux of fermentation is to allow the ingredients to speak for themselves. Flavors should develop naturally, relying on the biostransformative abilities of the selected microorganisms to produce desired effect. Bioprospecting in particular has yielded viable new options into the production of monoculture sour beer. The Lallemand Brewing team have been hard at work in collaboration with universities around the world to both rediscover and develop unique organisms for novel applications in the modern brewery. With a network of willing breweries and creative brewers, it is our hope here at Lallemand that we can continue to provide the tools they need. There will always be a place for a crisp, clean, mass-produced lager. But sometimes it's ok to color outside the lines.

DID YOU KNOW...

Yeasts is everywhere! Of the 1,500 identified species of yeast that live around, in, and on us, three in particular stand out.

Foremost is *Saccharomyces cerevisiae*. Besides its ancient and ever greater role in food, beverages, and nutritional supplements, modern biotechnology has harnessed the metabolic process of *S. cerevisiae* -- we know it as fermentation.

Product update

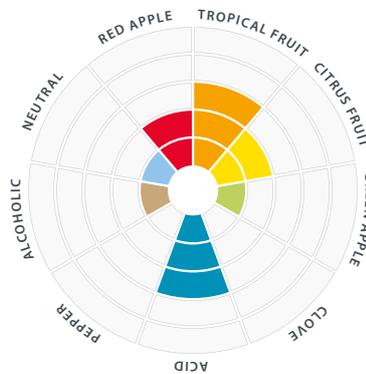
WILDBREW™ PHILLY SOUR LAUNCH

The wide variety of selected natural yeasts reflects the biodiversity, and yet this opportunity is still underexploited despite the large number of species and subspecies (other than *Saccharomyces cerevisiae*) that can be involved in fermentation. After years of research, development, and collaboration with [University of the Sciences](#) (Philadelphia, PA USA), Lallemand Brewing is proud to introduce its first Non-*Saccharomyces* in dry form: **WILDBREW™ PHILLY SOUR**. Isolated from nature by Dr. Matthew Farber, director of USciences Brewing Science Program and his research team; this yeast is able to produce both lactic acid and ethanol during primary fermentation.

Framed within the **WILDBREW™ PREMIUM SERIES** product line, **WILDBREW™ PHILLY SOUR** was individually selected from nature for its performance and sensory characteristics among many other yeasts. This yeast was determined to be of the genus *Lachancea*; however, the species is defined as new and the use of the product in sour beer production is patent pending (N° PCT/US20 18/043 148).

In Lallemand's Standard conditions wort at 20°C (68°C), **WILDBREW™ PHILLY SOUR** exhibits:

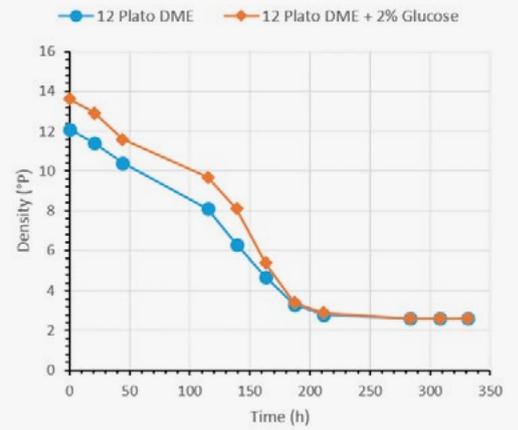
- Fermentation can be completed in less than 10 days.
- High attenuation and High flocculation
- Flavor notes of red apple, peach and honeydew melon; pleasant sourness
- Optimal temperature range 20-25°C (68-77°F)
- **Typical pH of 3,2-3,5 and titrable acidity of 0,1-0,4% lactic acid** (Higher levels will be achieved in worts that are higher in glucose)



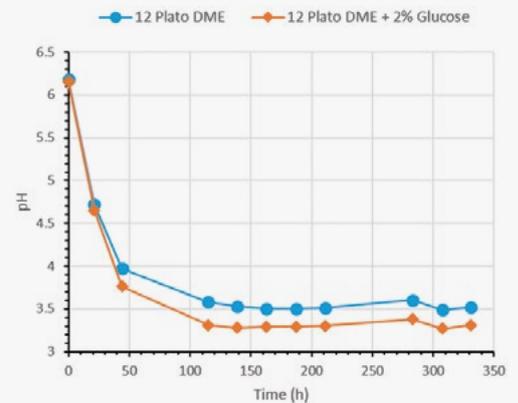
WILDBREW™ PHILLY SOUR is a pure culture of *Lachancea* spp. It will produce sour beer in 7-10 days at 25°C. The acidity produced is described as smooth, elegant, and subtle. The resulting brew is highly balanced with flavor notes of red apple, peach and honeydew melon.

WILDBREW™ PHILLY SOUR is recommended at a **pitch rate** of 50-100g per hL of wort, which is sufficient to achieve a minimum of 2.5-5 million viable cells/mL. **Available in 500g and 11g sachets.**

Pure Culture Performance: Philly Sour, 20°



Pure Culture Performance: Philly Sour, 20°



VERDANT

BREWING CO.

A NEW YEAST IS COMING SOON
 selected & produced in partnership
 with Verdant Brewing Co.

LalBrew® PREMIUM SERIES



UPGRADE TO OUR PILOT BREWERY, AMAZING SPONSORSHIP PARTNERS



It's not often that you move a [brewing] school and in addition find industry partners willing to add their expertise, innovation and good will. For everyone's benefit, our existing 1bbl pilot brewery was relocated from Kendall College to our new Green Street campus and we took the lead to share the exciting news and opportunity with selected suppliers, offering them an opportunity to showcase their equipment and innovations. The generosity of our sponsors has allowed Siebel to expand our R+D capability, consulting and training capacity and provides students with 'hands on' experience of new technologies.

A significant donation from Micro Matic, the leading global supplier of dispense equipment, has furnished our Bierstube with all new state of the art dispense equipment, including dispense towers, under counter coolers, sinks, glycol chiller, gas/beer manifolds, custom beer python and high temperature glass washer for our Biersommelier classes and draught beer training. This support from Micro Matic has allowed us to turn our Bierstube into a state of the art training room and sensory facility.

Paul Mueller Company topped up the draught system, donating two horizontal multipurpose dispense tanks that we will use with a food grade liner for dispensing under compressed air rather than CO₂.

Andritz, Vienna has donated a mash filter [some call it mash press] that allows us to brew with alternative carbohydrate sources, such as sorghum, millet or any other raw material that would struggle in a classic lauter tun.

With this innovative technology, future graduates can not only become more familiar with the mash filtration process as such, but also have the opportunity to explore an alternative process for wort extraction in the brewing process.

The next ace is our can filler! Wild Goose, a Colorado outfit from Louisville, catering to the craft beer sector for more than a decade, and has built more than 1000 canners, has donated their latest innovation to the Siebel Institute: The Gosling. It will allow us to fill up to 12 cans per minute and is perfect for trials and market focus groups or for neighborhood brewers wanting to drop by with a keg of beer and leave with trays of cans. We are the first school in North America with such a can filler and seamer.

Malthandling LLC from Chicago have contributed a brand new malt mill, George Fischer gifted all high end glycol fittings, and Pro Refrigeration provided a 50 % discount on the new glycol unit that had to be craned in through the roof.

We are still gathering more laboratory equipment from Anton Paar and Pentair, stay tuned. All sponsors have joined Siebel as strategic education partners in a two way relationship. We are convinced that our Siebel brand will benefit from suppliers engaging with us and vice versa. The key accounts of our partners will have the opportunity to test our specialized lectures and, hopefully, more of their customers will turn into Siebel students. That's what we call a win - win!

Homebrew Update

THE WORLD'S LARGEST VIRTUAL BIG BREW

Lallemand was recently part of **Big Brew**, put on by the American Homebrewers Association for over 20 years that had a new twist on it this year due to the Covid-19 virus. It would not keep our homebrewers across the globe from participating this year! The event included a virtual toast and virtual brewing from across our lands. Whether or not you brewed the **Homebrew Con** commemorative recipe featuring our Voss Kveik strain, folks were still able to get together via online chats and shared the homebrewing love. A note on the commemorative beer made by Jackalope Brewing Company in Nashville, TN:

The beer was named after Pangaea Proxima, which is a theorized future supercontinent that would form 300 million years in the future. "We thought it fit the idea well. Also, we really like the idea of bringing people from around the world together in a time when we are all so separate."

The Big Brew event pulled in 77 countries, 56 states and territories, 4,800 participants, and nearly 32,000 gallons were made. That is serious dedication to a hobby that Lallemand is so proud to support.

See the recipe here:

homebrewersassociation.org/homebrew-recipe/pangaea-proxima-polar-ipa/

