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**ISOLATION AND SELECTION OF NATIVE YEAST POTENTIALLY
USABLE IN CRAFT BREWERY**

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Craft beer in Argentina is an innovative sector that promotes regional productive poles. Craft production of beers gains relevance when reaches regional identity through the incorporation of local products to elaboration. The yeast is critical to beer, which involves much more than converting sugars into alcohol, it contributes to beers flavors and aroma too. With the aim to generate a technological transfer to craft breweries, we have developed an isolation and selection procedure of native yeast from grape and evaluated its potential use in beer production. The yeasts were isolated from the grape bloom. Three (3) isolates (C1, C2, and C3) strains, which were identified as *Saccharomyces cerevisiae* by biochemical tests (API 20 C BioMérieux), were selected for the study. The yeasts were inoculated in beer wort and cultivated at 20°C. In final products, there were evaluated alcohol production, transparency/turbidity, and organoleptic characteristics by sensory analysis. Commercial yeast was used as a control. The three evaluate strains show a product color similar to commercial yeast (amber yellow). But the strain named C3 showed better ability of alcohol production, with values of 3.73% alcoholic graduation, similar to control yeast (4.18%). The strains C1 and C2 showed very low values of 0.64 and 0.59%, respectively. Regarding transparency/turbidity, the strain C3 was presented limpid with low turbidity (like control), while the C1 and C2 strains showed high turbidity. Finally, the sensory analysis indicated that only C3 showed a pleasant aromatic profile and excellent taste in the mouth, with acceptable acidity. These preliminary results indicate that the C3 strain could be successfully used in craft brewery, due to its similarities to commercial yeast. Future studies are needed to adjust fermentation temperatures, batch volume, reproducibility over time, number of cells and viability necessary and conservation conditions.

HUMAN CLINICS AND ODONTOLOGY

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ONYCHOMYCOSIS STUDY IN SAN LUIS CITY, ARGENTINA

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Onychomycosis accounts for up to 50% of all nail disorders. They can be caused by yeasts, dermatophytes, and non-dermatophyte molds. This study was carried out to determine the prevalence, mycological test results, etiological agents, and clinical presentation of onychomycosis. All fingernail and toenail samples taken during a two-year period at two diagnostic centers were included. A total of 532 samples were analyzed, of which 85.15% (N = 453) were from toenails and 14.85% (N = 79) from fingernails. The mean age of the patients was 38.83 ± 16.03 years, and 72% were females. In toenails, direct examination (DME) using potassium hydroxide (KOH) showed 55.63% (N = 252) positive samples, and cultures were positive in 50.55% (N = 229), similar to other studies of the same characteristics. In fingernails, the DME was positive in 44.30% (N = 35) of the samples, and 46.83% (N = 37) of the cultures was positive. Dermatophytes were prevalent in toenails of both sexes; in fingernails, yeast were prevalent in females and dermatophytes in males. Non-dermatophyte molds corresponded to 4.8% (N = 11) of toenail and 2.70% (N = 1) of fingernails isolates. As agents of onychomycosis, dermatophytes were detected in N = 210 (78.95%), yeasts in N = 43 (16.16%) and non-dermatophyte fungi in N = 12 (4.51%) patients. Among dermatophytes, *Trichophyton rubrum* was found to be the commonest etiological agent (75.24%, N = 158) followed by *T. mentagrophytes* (17.62%, N = 37). Of the samples cultured, *Candida albicans* was the most prevalent (3.72%, N = 36) yeast. The majority of fungal nail infections were characterized clinically by distal and proximal subungual onychomycosis. Early detection of onychomycosis is very important because it is more difficult to treat than most dermatophytosis due to the inherent slow growth of the nail. The prevalence is increasing, being influenced partly by its association with advanced age, lifestyle, and comorbidities. The current epidemiologic trends and knowledge of the onychomycosis causal agents demonstrate the need of new strategies for prevention and treatment of onychomycosis as health problems.