Comparison of Results

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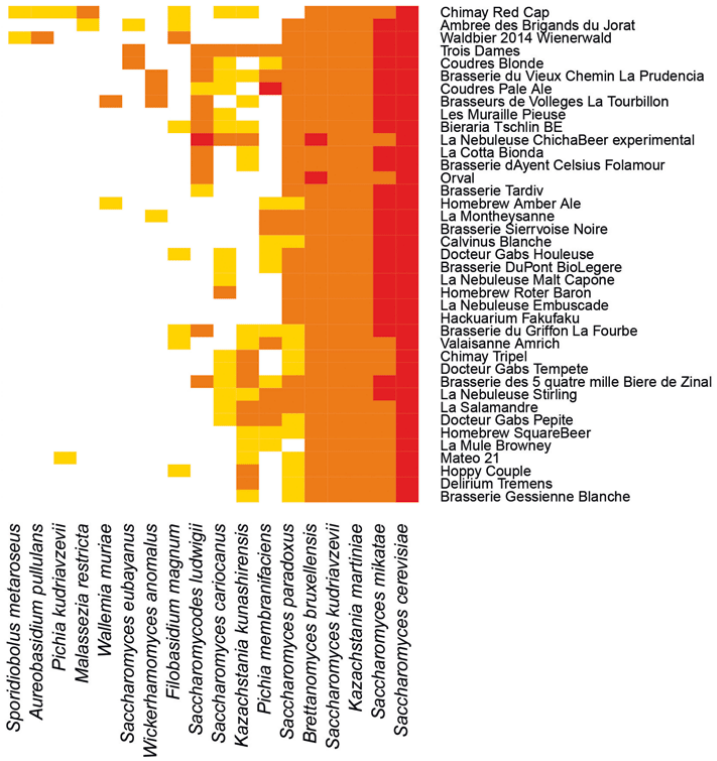
1 Introduction

This document compares the results from Yedil's Master's thesis with the newly analyzed results with ampvis2.

2 Results

2.1 Heatmap of the number of reads per ITS per beer

Comparison of heatmap of the number of reads per ITS per beer between the original thesis, reproduced results, and the new results



(a) Thesis Original Results

(b) Thesis Reproduced Results

Figure 1: Heatmap of the number of reads per ITS per beer
Beer names are shown on the right and species names are shown at the bottom.

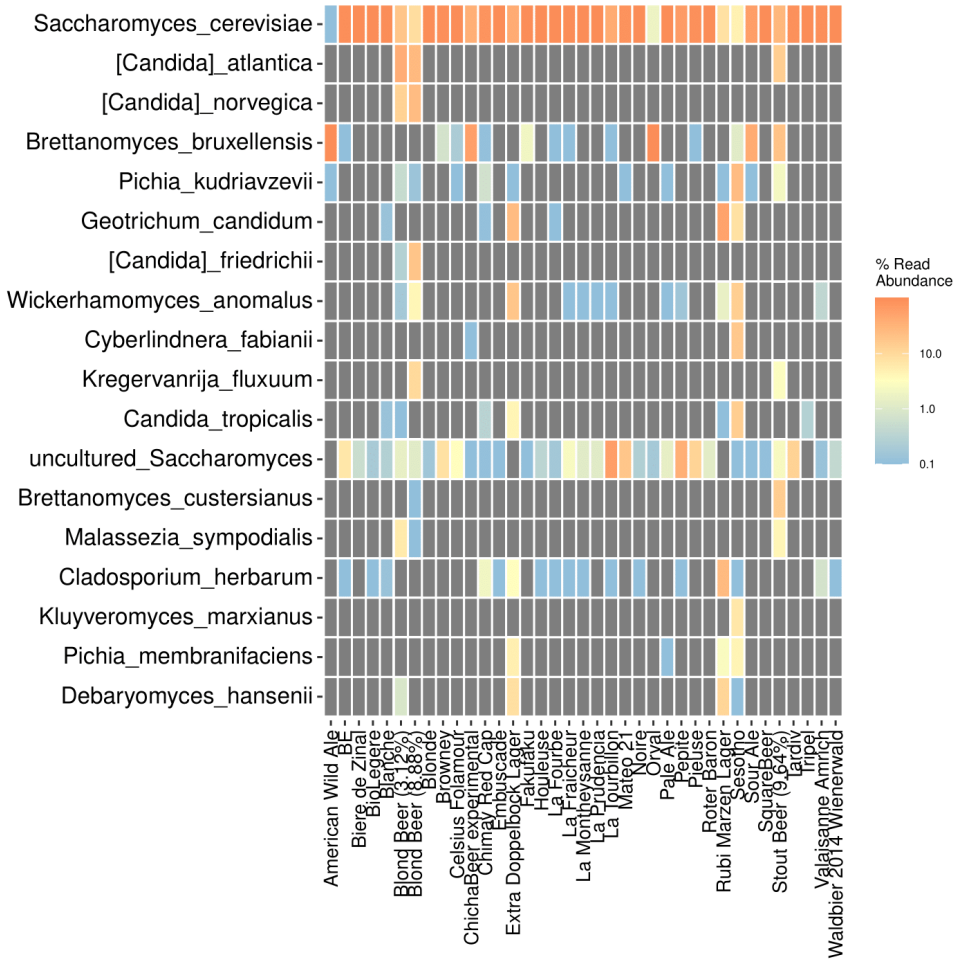
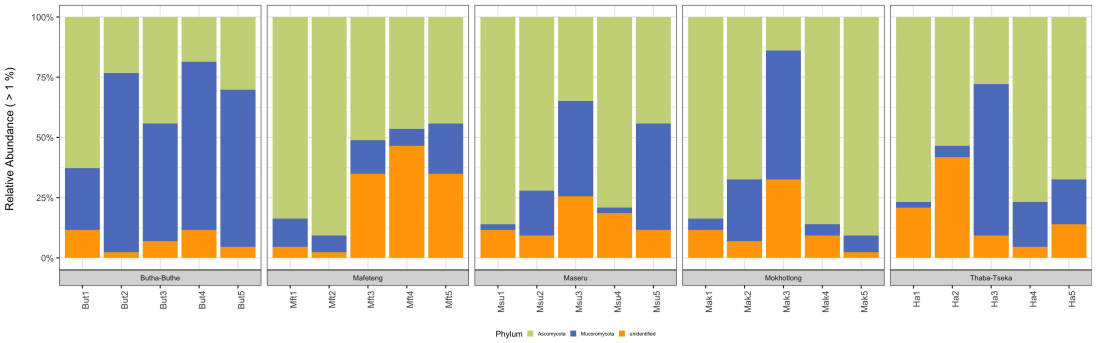


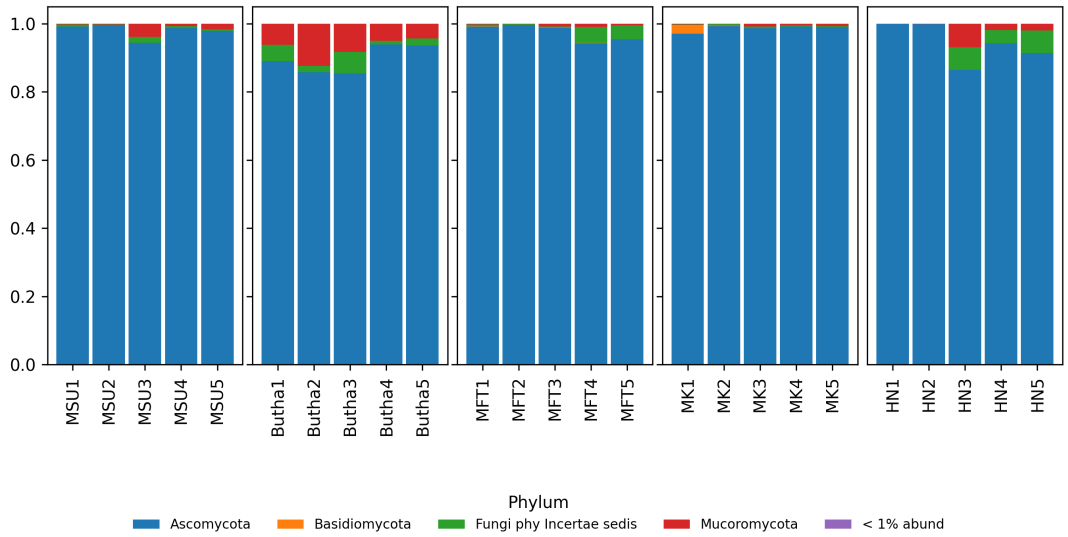
Figure 2: New Results (OTU_ITS_UNITE)
Heatmap of the relative abundance of fungal species across different beer samples. The x-axis represents various beer samples, while the y-axis lists the fungal species identified.

2.2 Distribution of fungal Phylum in Sesotho

Comparison of the distribution of fungal Phylum in Sesotho between the original thesis, reproduced results, and the new results.



(a) Thesis Original Results



(b) Thesis Reproduced Results

Figure 3: Distribution of fungal Phylum in Sesotho
In the graphical representation, the x-axis delineates the various breweries, labeled as Maseru (MSU), Mafeteng (MFT), Thaba-Tseka (HN), Butha-Buthe (Butha), and Mokhotlong (MK). To illustrate, the label "MK1" denotes a sample sourced from Mokhotlong during the first stage of fermentation. The fungal phyla Ascomycota and Mucoromycota emerged as the predominant groups in the study. Notably, Ascomycota displayed a higher dominance in the reproduced results compared to the original findings.

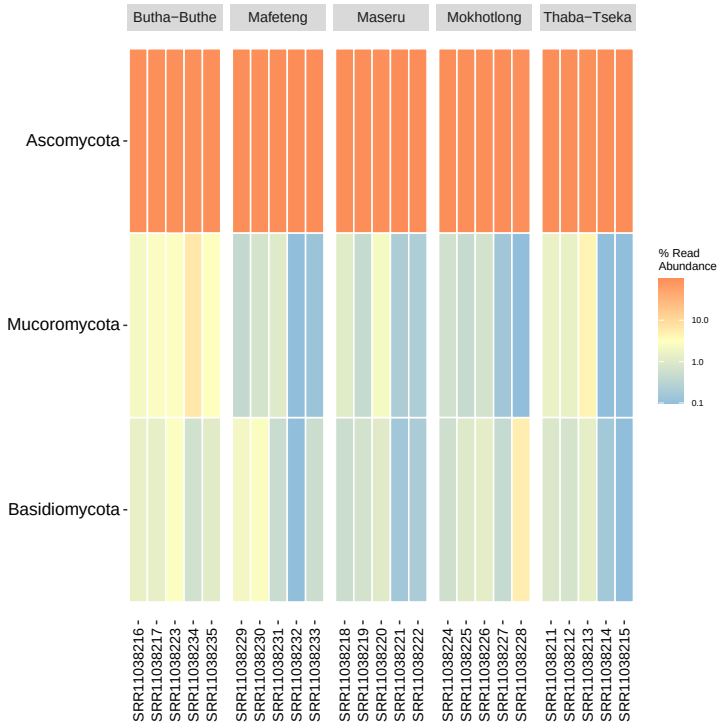


Figure 4: New Results (OTU_ITS_UNITE)
Distribution of fungal Phylum in Sesotho. The x-axis represents various breweries, while the y-axis lists the fungal phyla identified.

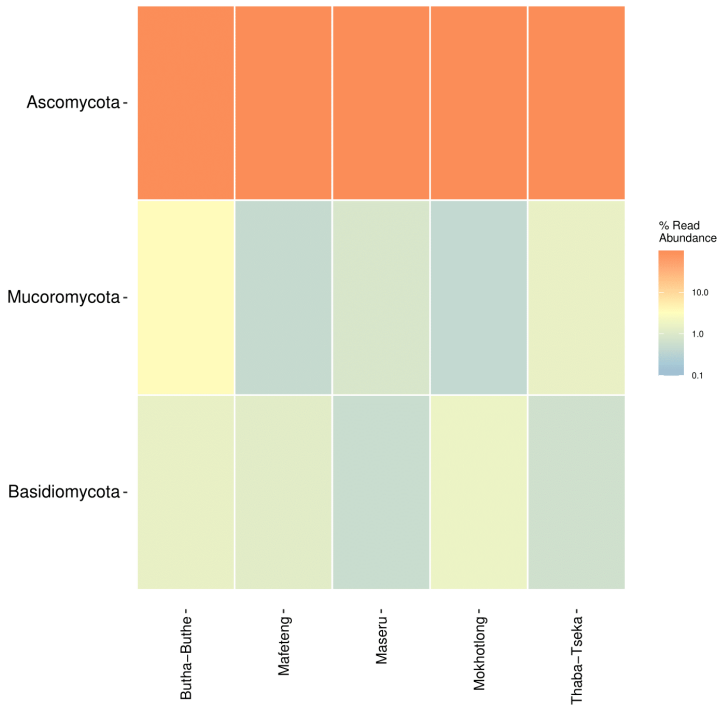
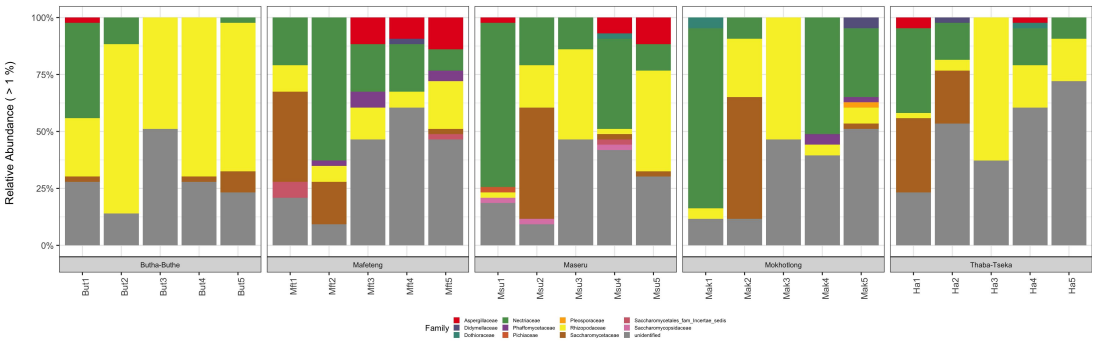


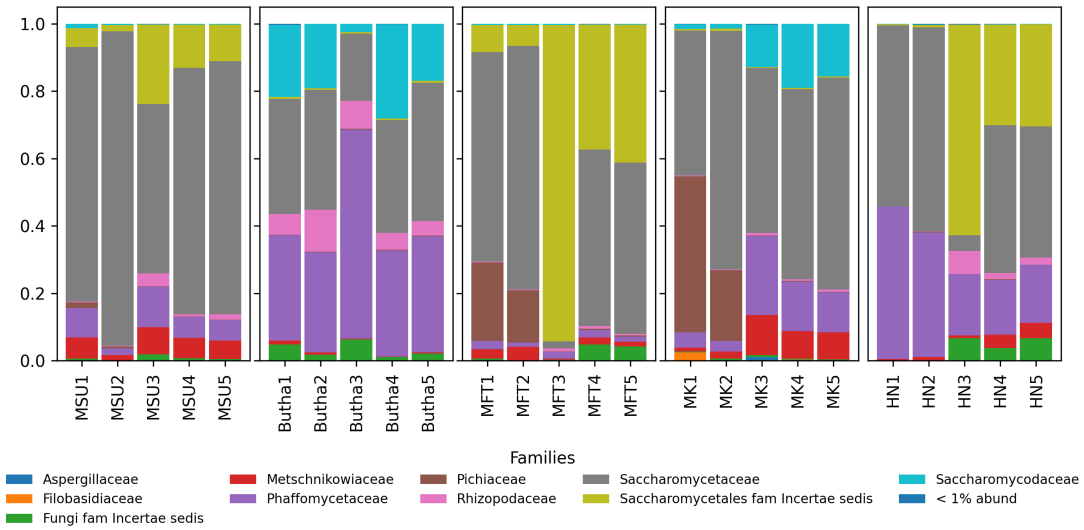
Figure 5: New Results v2 (OTU_ITS_UNITE)
samples of the respective breweries summarized

2.3 Distribution of fungal Family in Sesotho

Comparison of the distribution of fungal Family in Sesotho between the original thesis, reproduced results, and the new results.



(a) Thesis Original Results



(b) Thesis Reproduced Results

Figure 6: Distribution of fungal Family in Sesotho
In alignment with the original findings, the reproduced data also identified the presence of Phaffomycetaceae and Pichiaceae.

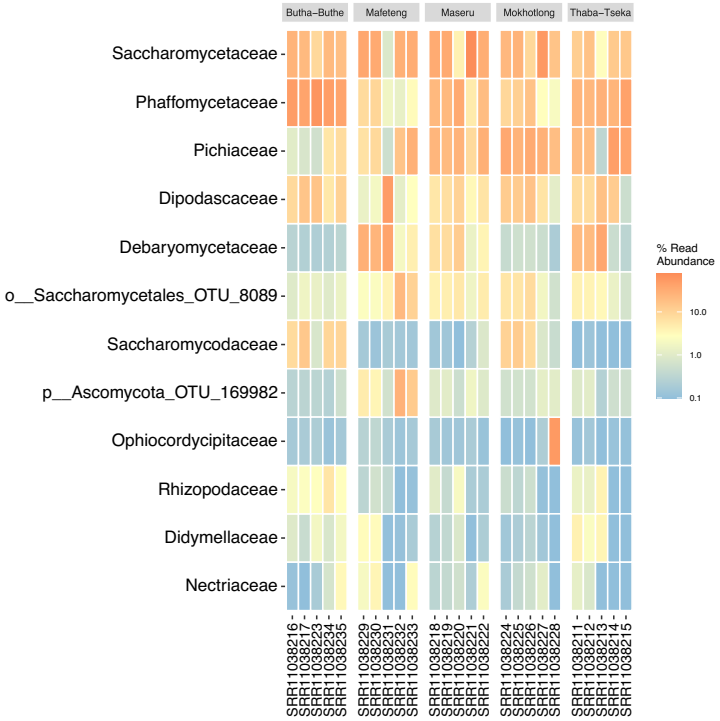


Figure 7: New Results (OTU_ITS_UNITE)
Distribution of fungal Family in Sesotho. The x-axis represents various breweries, while the y-axis lists the fungal families identified.

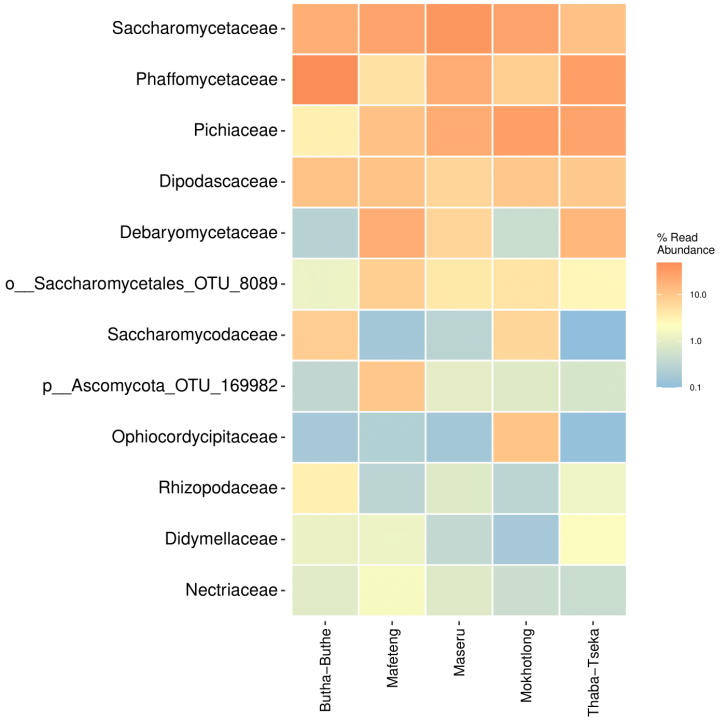
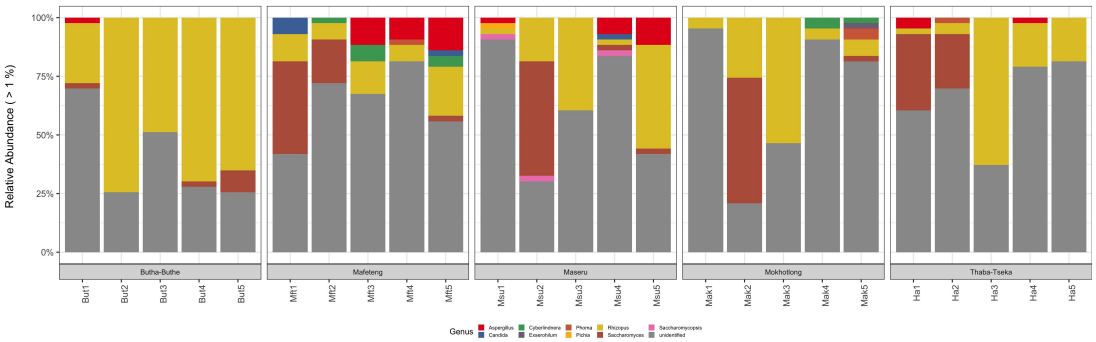


Figure 8: New Results v2 (OTU_ITS_UNITE)
samples of the respective breweries summarized

2.4 Distribution of fungal Genus in Sesotho

Comparison of the distribution of fungal Genus in Sesotho between the original thesis, reproduced results, and the new results.



(a) Thesis Original Results

(b) Thesis Reproduced Results

Figure 9: Distribution of fungal Genus in Sesotho
Based on the analysis of the distribution of fungal genera in Sesotho, Rhizopus emerges as the dominant genus in the original findings. In contrast, Saccharomyces is more prevalent in the reproduced data.

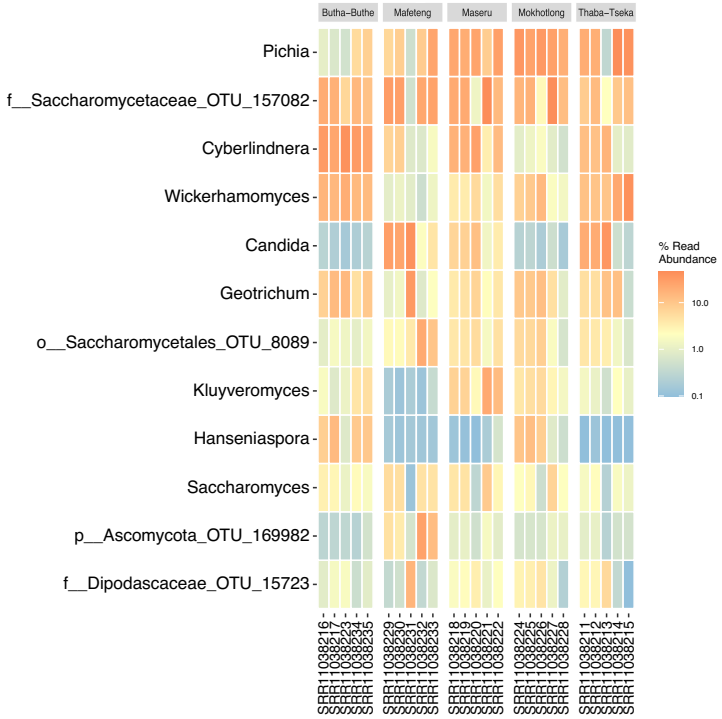


Figure 10: New Results (OTU_ITS_UNITE)
Distribution of fungal Genus in Sesotho. The x-axis represents various breweries, while the y-axis lists the fungal genera identified.

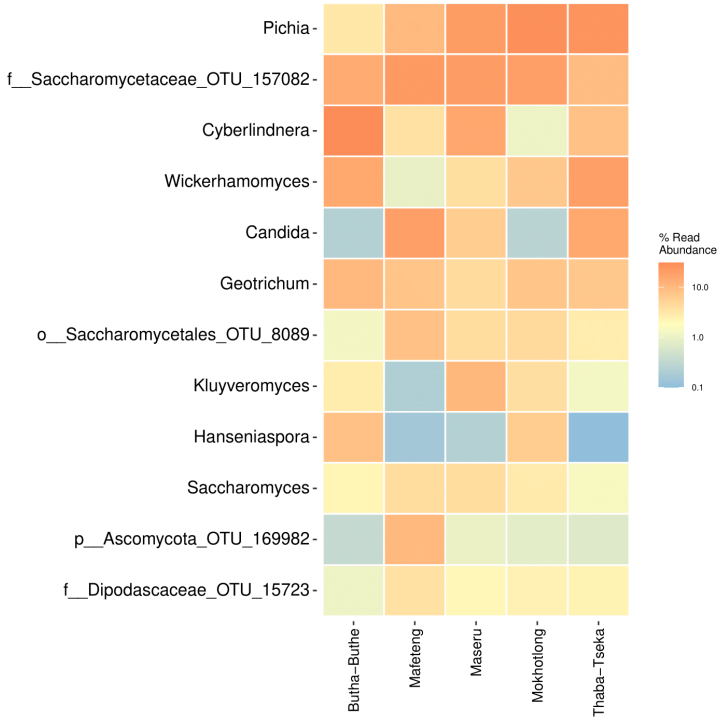


Figure 11: New Results v2 (OTU_ITS_UNITE)
samples of the respective breweries summarized