

# Comparison of Results

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# 1 Introduction

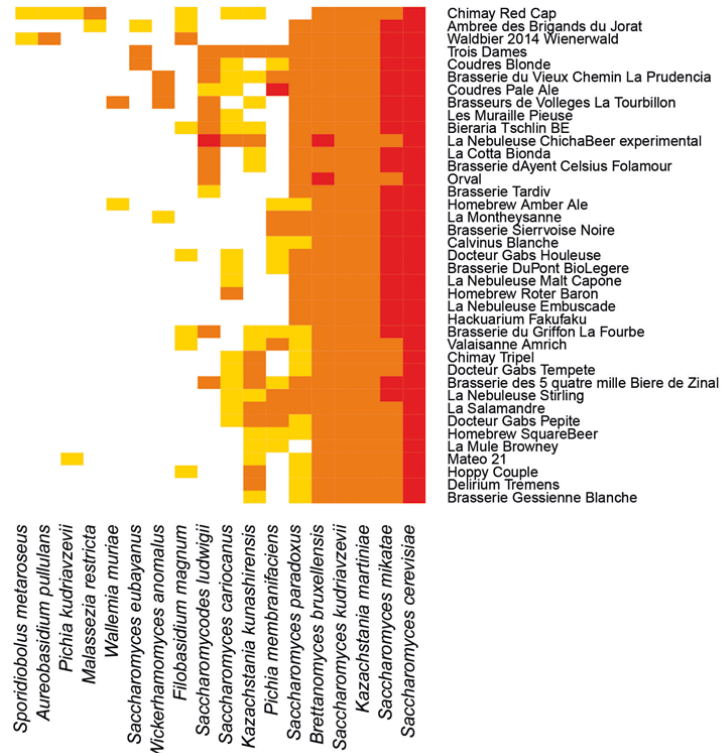
This document compares the results from Yedil's Master's thesis with the newly analyzed results with ampvis2.

## 2 Results

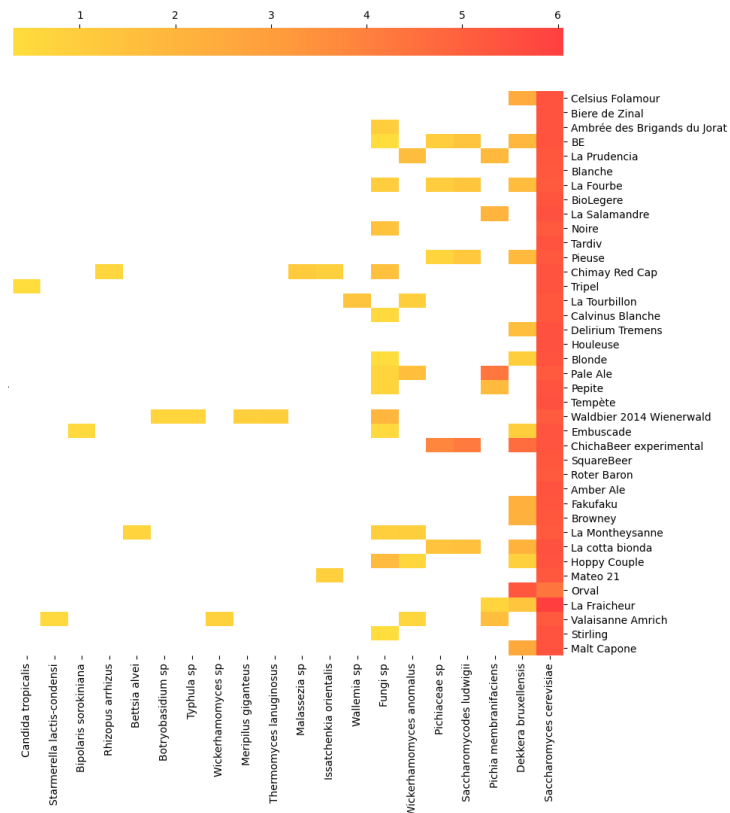
### 2.1 Heatmap of the number of reads per ITS per beer

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

## Comparison of Results

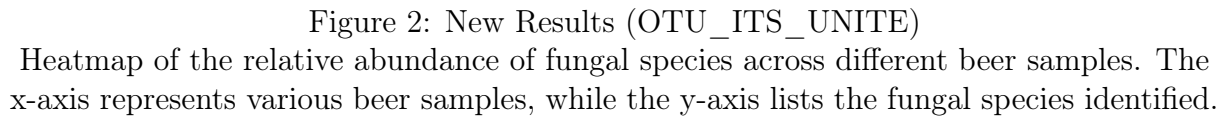


(a) Thesis Original Results



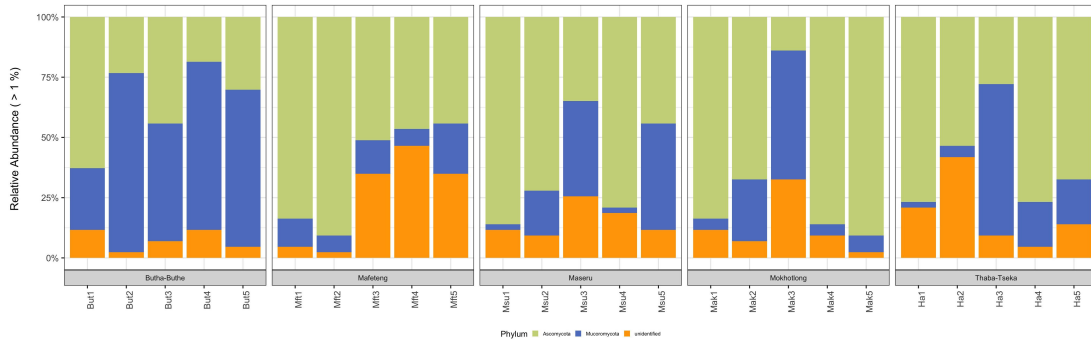
(b) Thesis Reproduced Results

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.

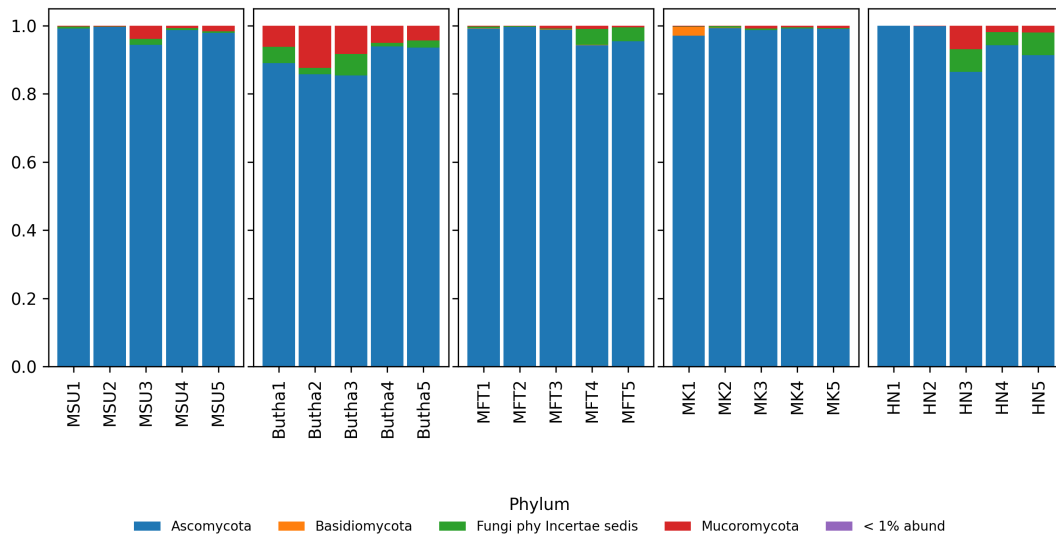


### 2.2 Distribution of fungal Phylum in Sesotho

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), Buthe-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.

## Comparison of Results

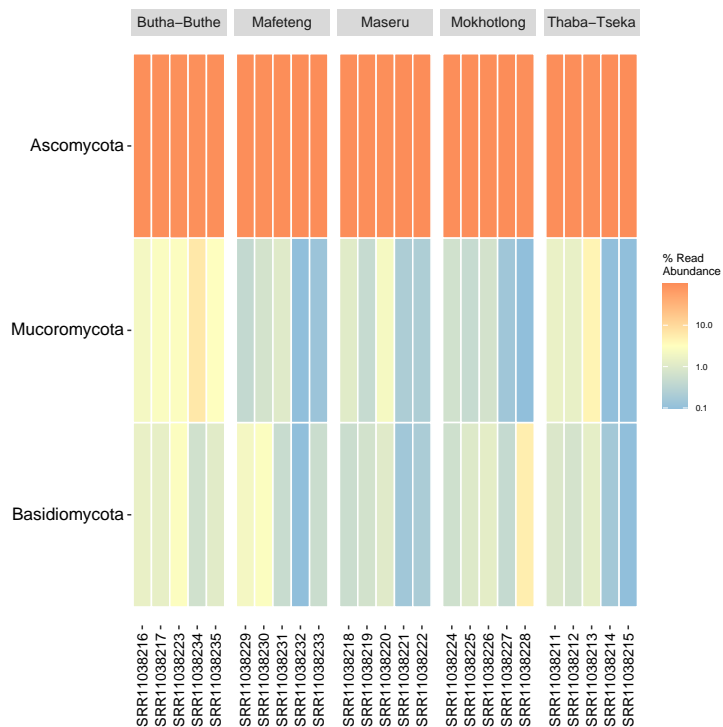


Figure 4: New Results (OTU\_ITS\_UNITE)  
Distribution of fungal Phylum in Sesotho. The x-axis represents various breweries, while the y-axis lists the fungal phyla identified.

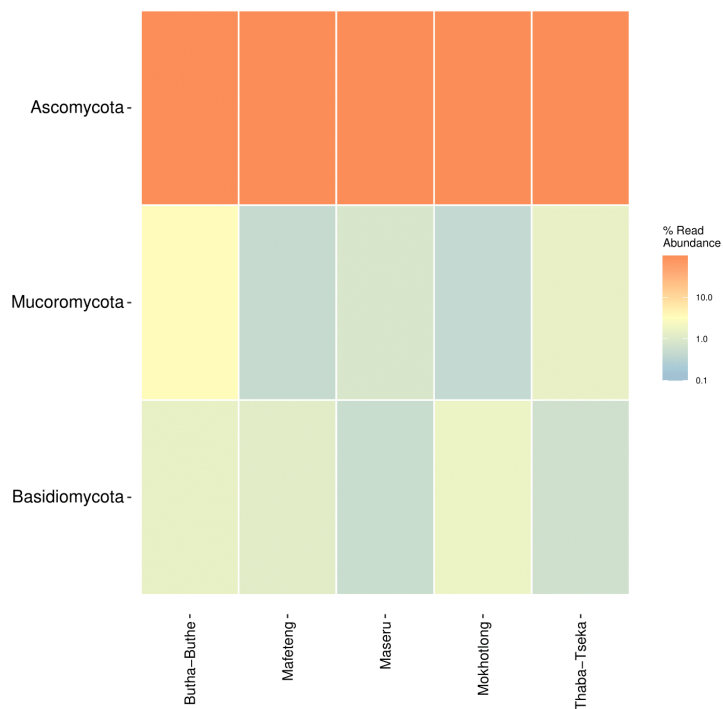


Figure 5: New Results v2 (OTU\_ITS\_UNITE)  
samples of the respective breweries summarized





## Comparison of Results

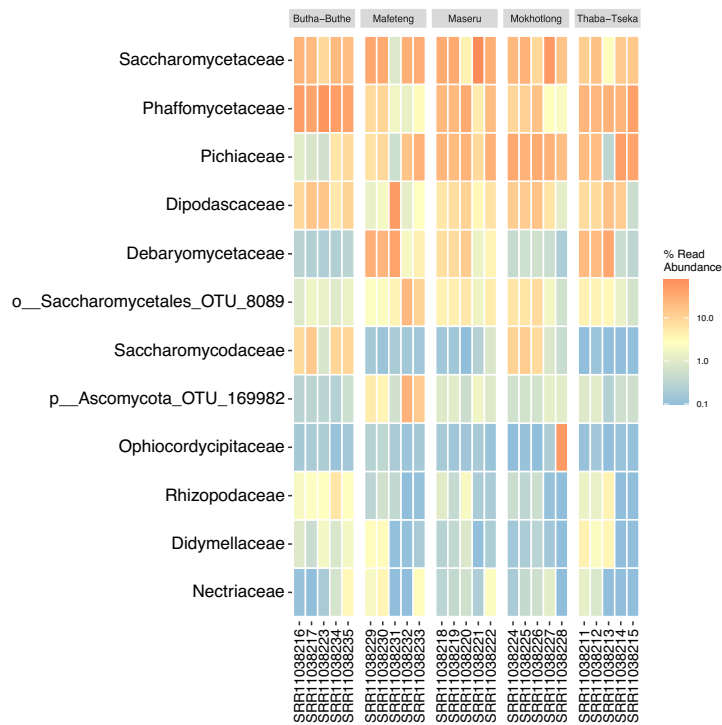


Figure 7: New Results (OTU\_ITS\_UNITE)  
Distribution of fungal Family in Sesotho. The x-axis represents various breweries, while the y-axis lists the fungal families identified.

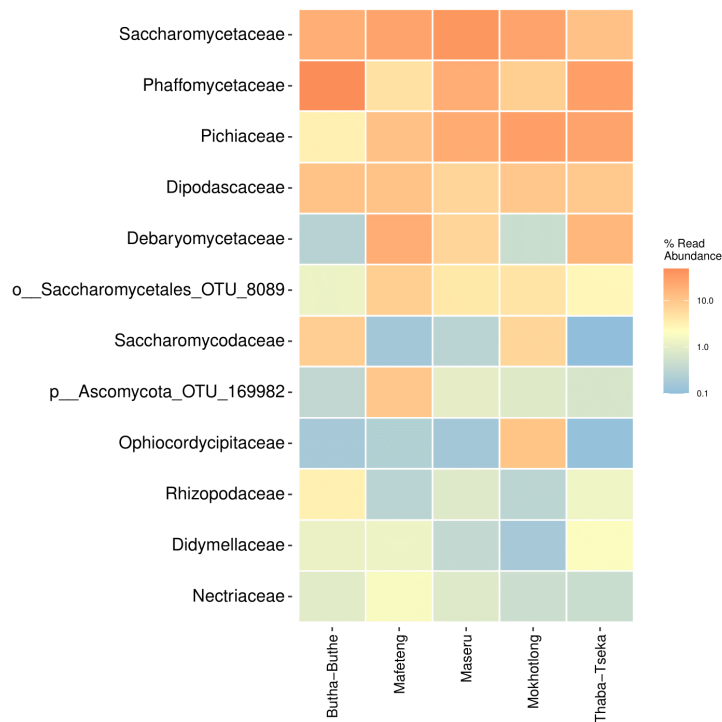
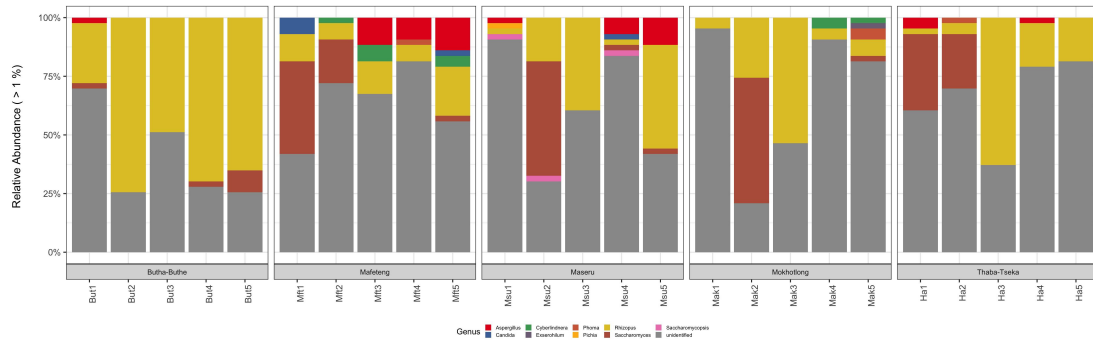


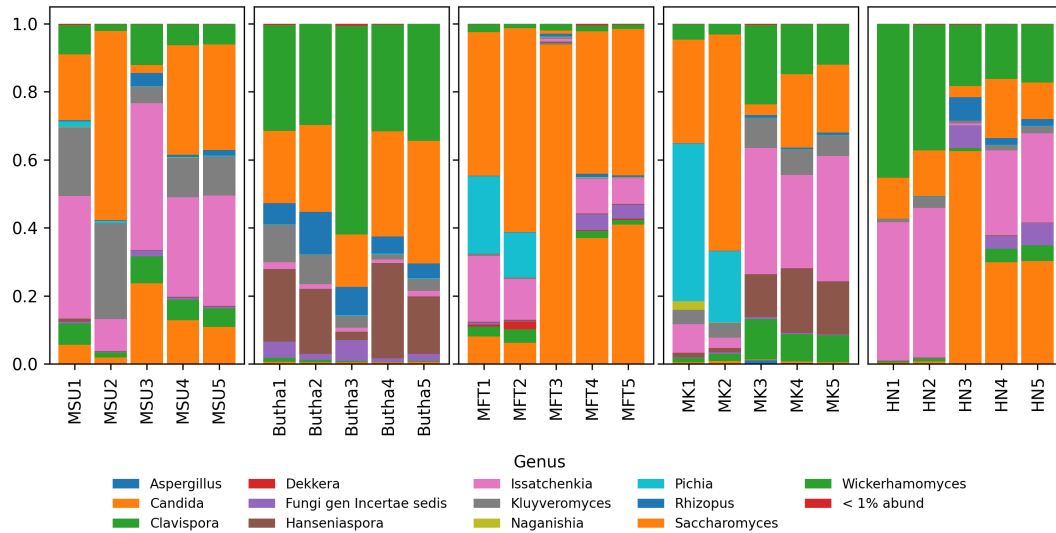
Figure 8: New Results v2 (OTU\_ITS\_UNITE)  
samples of the respective breweries summarized

### 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.

## Comparison of Results

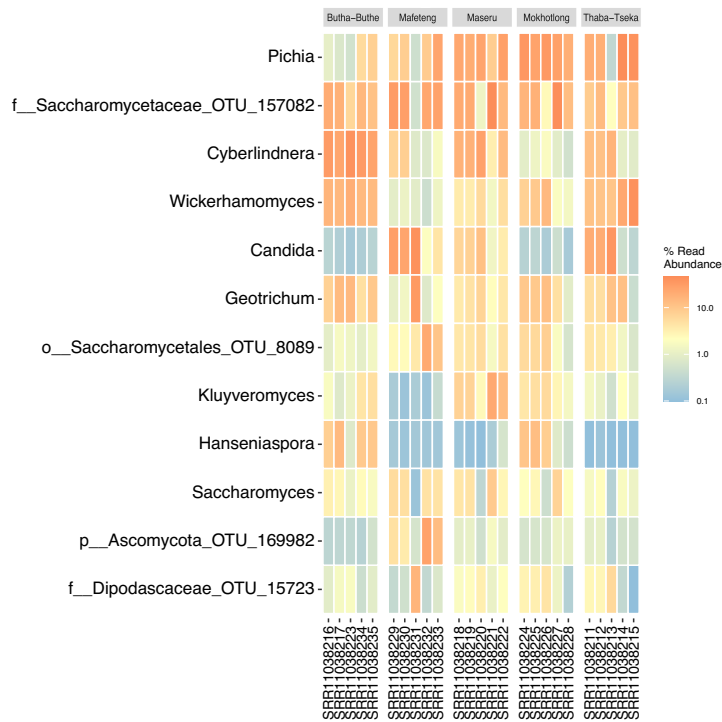


Figure 10: New Results (OTU\_ITS\_UNITE)  
Distribution of fungal Genus in Sesotho. The x-axis represents various breweries, while the y-axis lists the fungal genera identified.

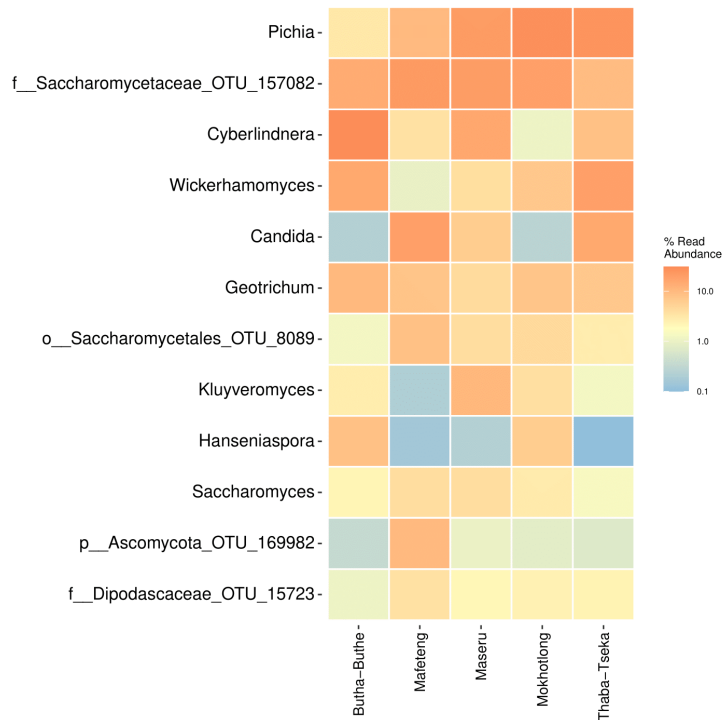


Figure 11: New Results v2 (OTU\_ITS\_UNITE)  
samples of the respective breweries summarized