

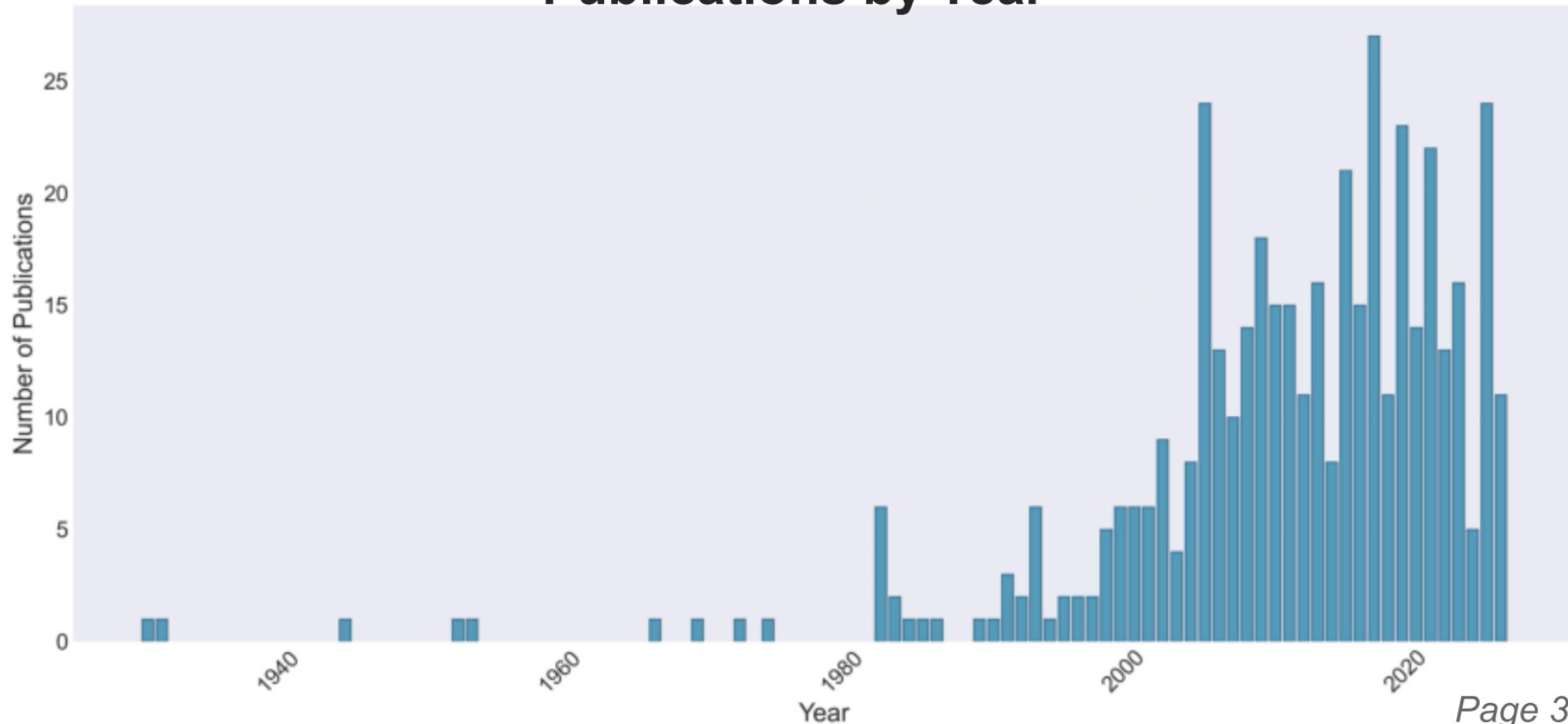
# **Meta-Analysis Graphical Abstract**

**Total Papers: 459**

**Date: 2025-12-16**

# **Overview**

# Publications by Year



# Metadata Completeness

Metadata Field

Abstract

42.5% (195/459)

Venue

83.2% (382/459)

PDF

13.1% (60/459)

DOI

90.4% (415/459)

Citations

48.4% (222/459)

Authors

86.5% (397/459)

Year

93.7% (430/459)

0

20

40

60

80

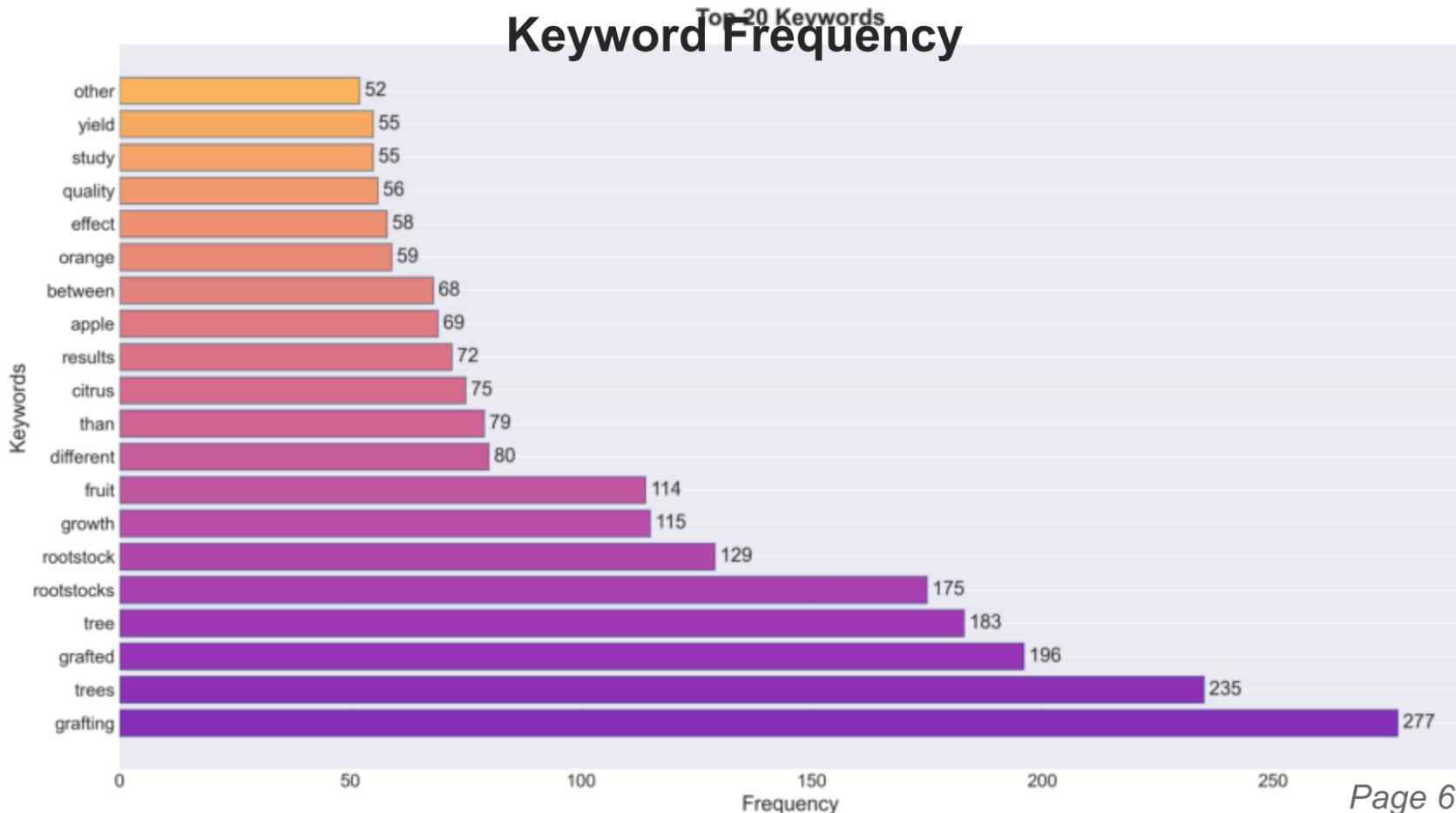
100

Completeness (%)

Page 4

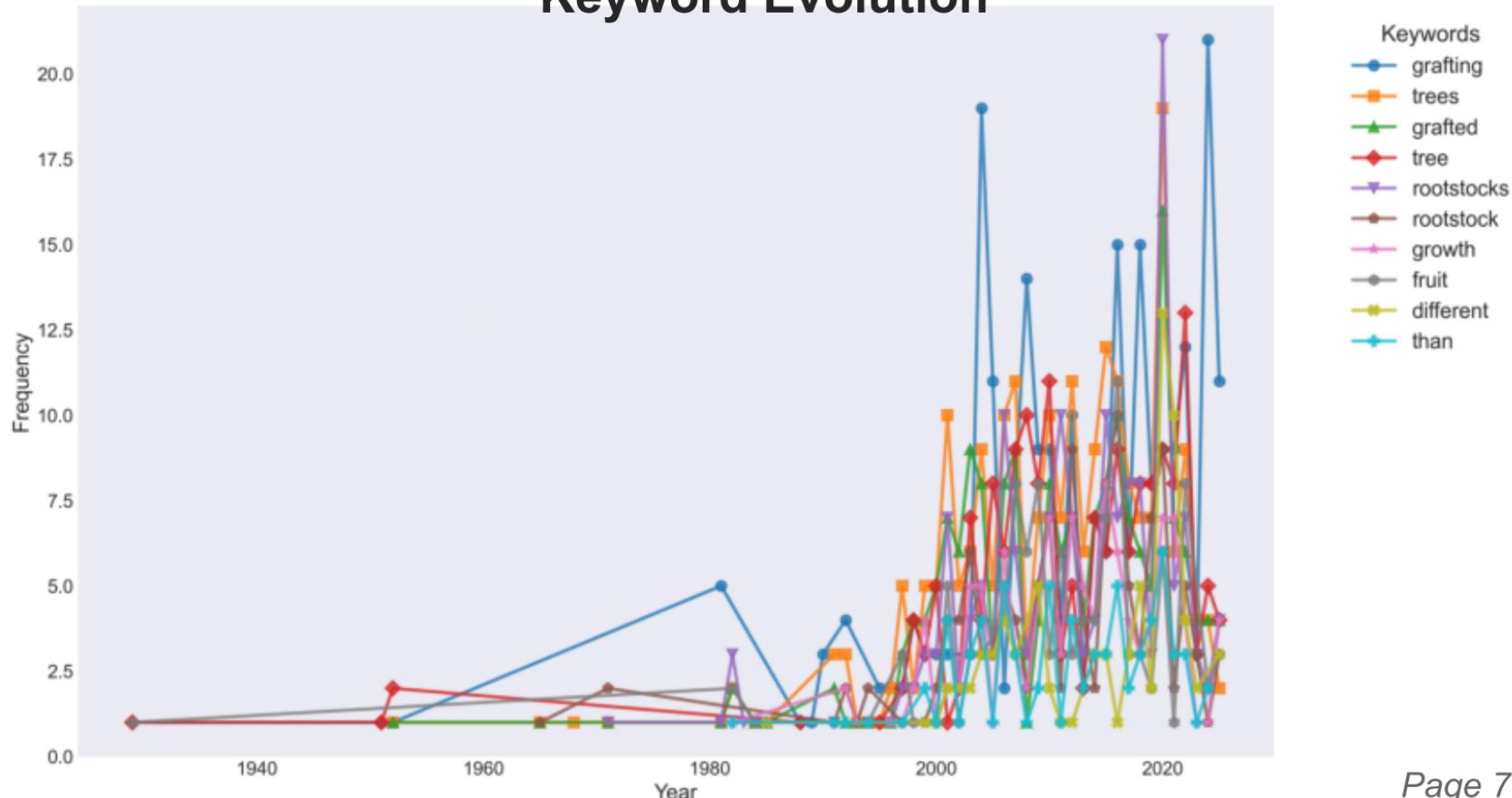
# **Keyword Analysis**

# Keyword Frequency



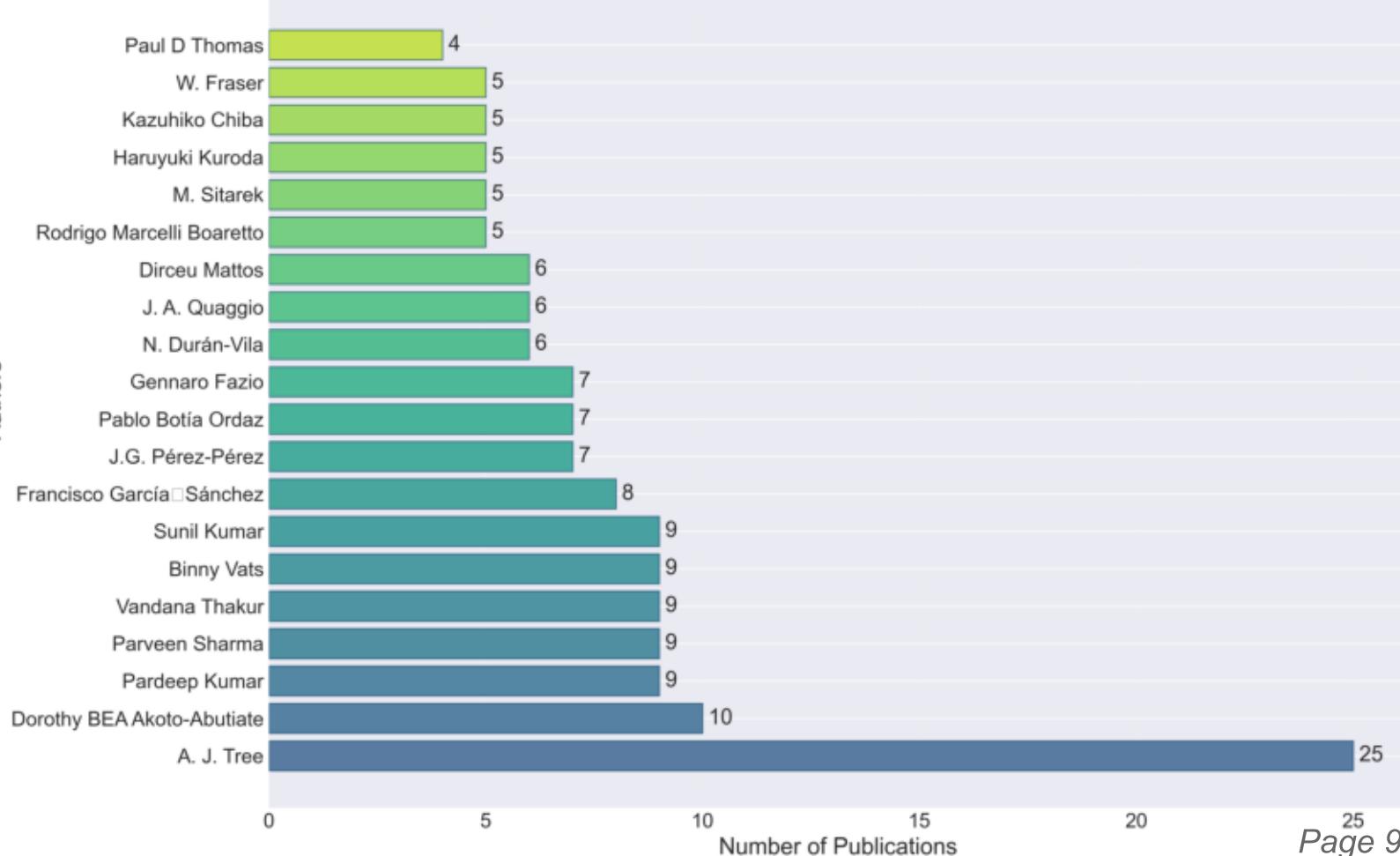
# Keyword Evolution Over Time

## Keyword Evolution

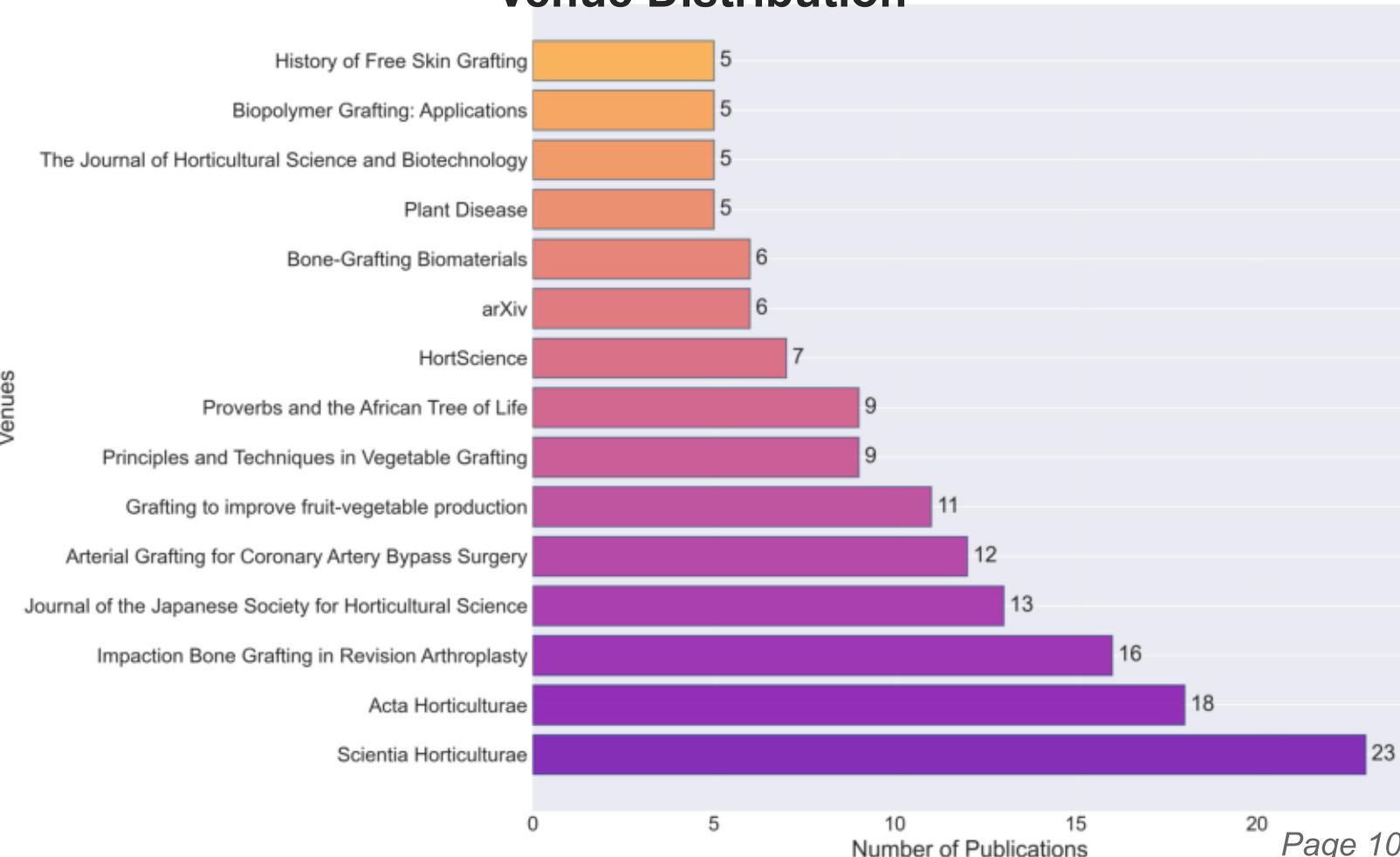


# **Author & Venue Analysis**

# Author Contributions

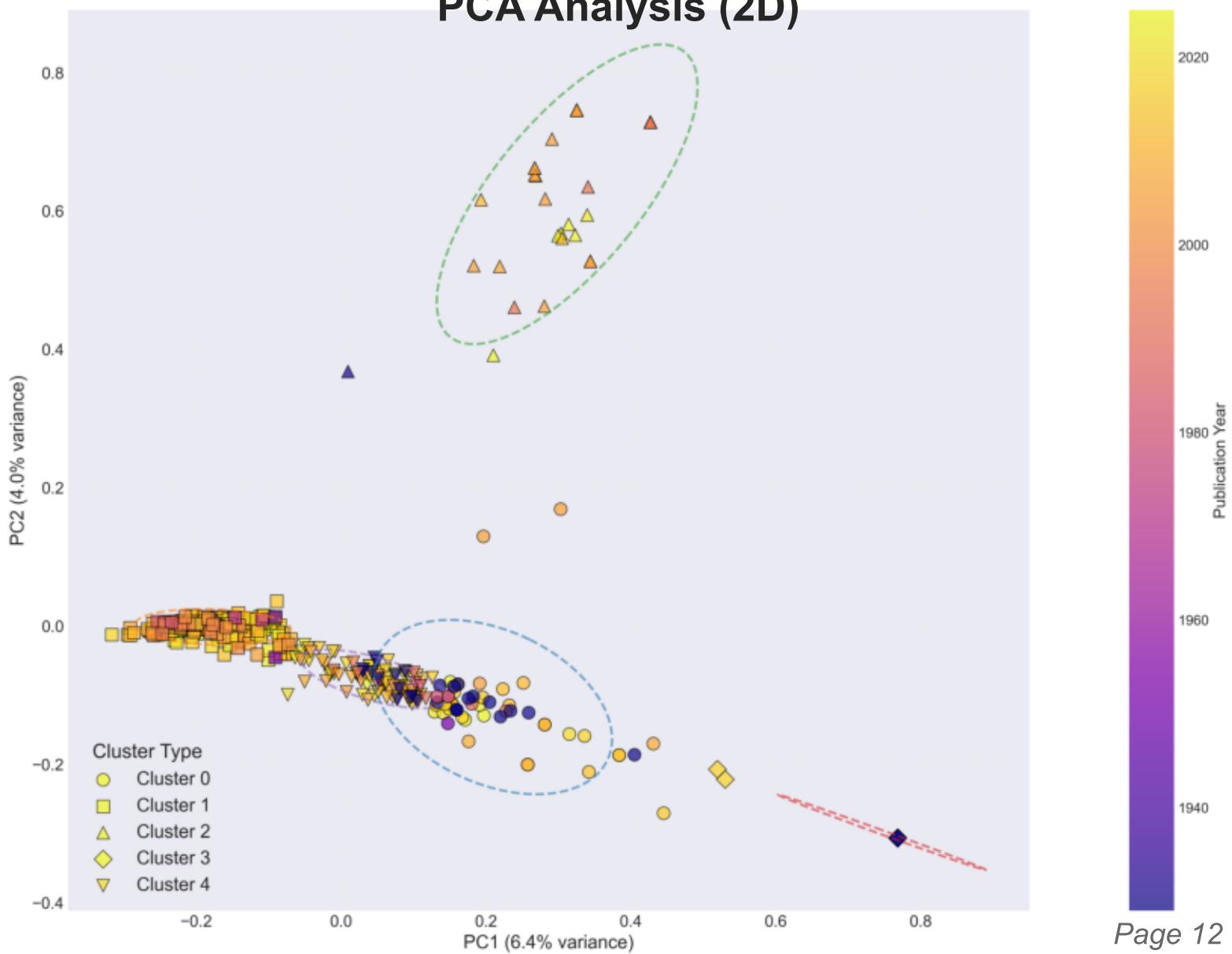


# Venue Distribution



# **PCA Analysis**

# PCA Analysis (2D)

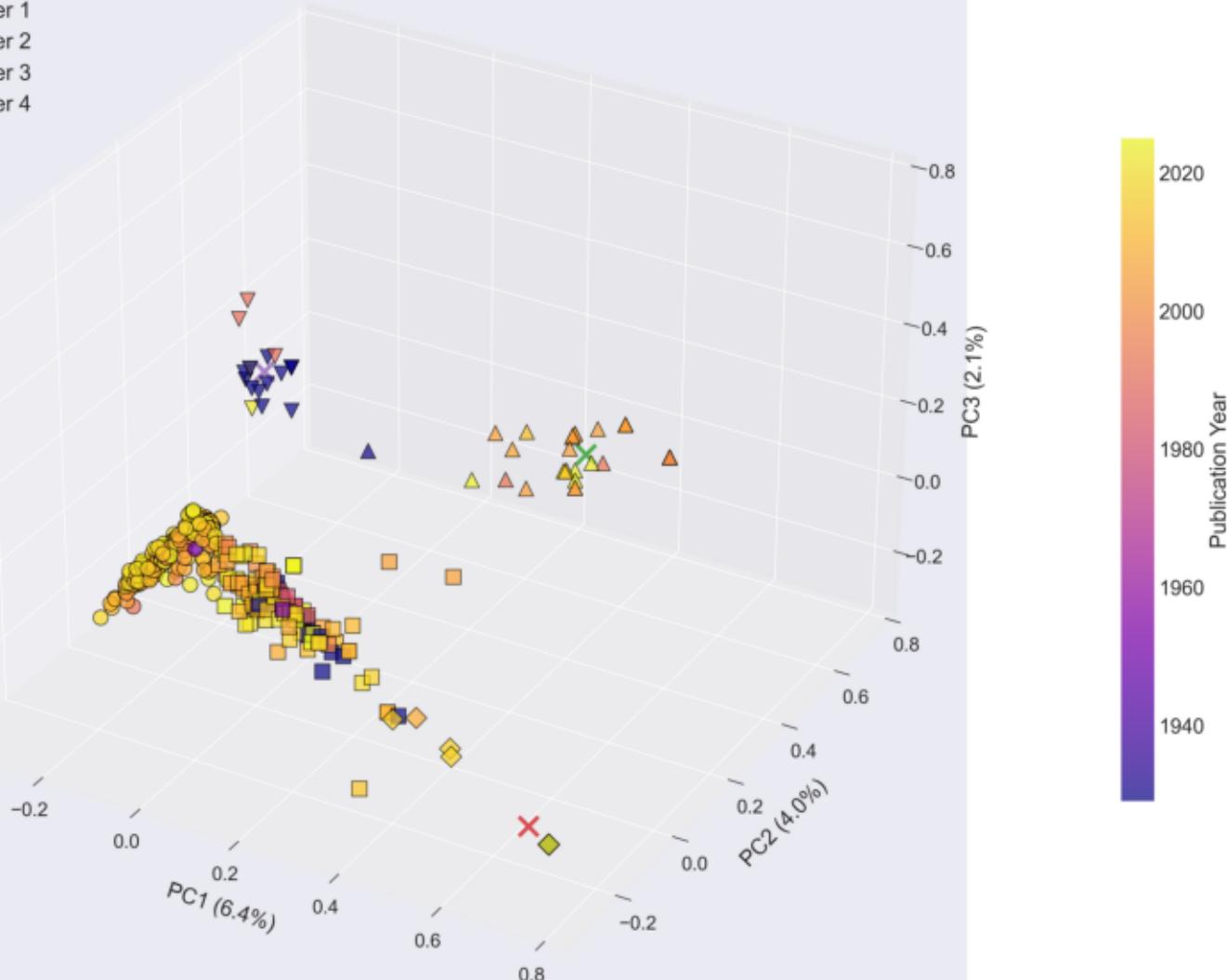


# PCA Analysis of Papers (3D)

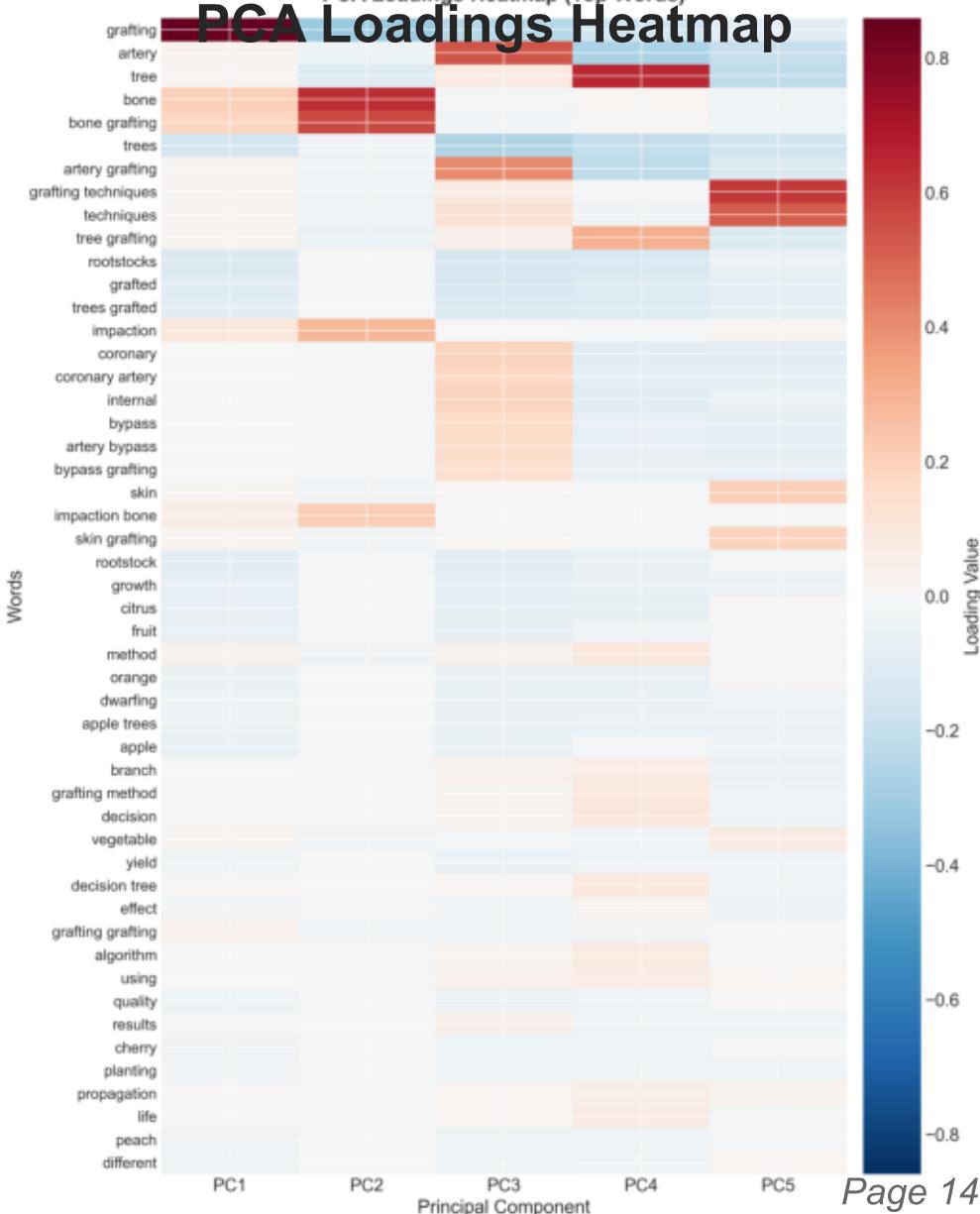
## PCA Analysis (3D)

Cluster Type

- Cluster 0
- Cluster 1
- ▲ Cluster 2
- ◆ Cluster 3
- ▼ Cluster 4



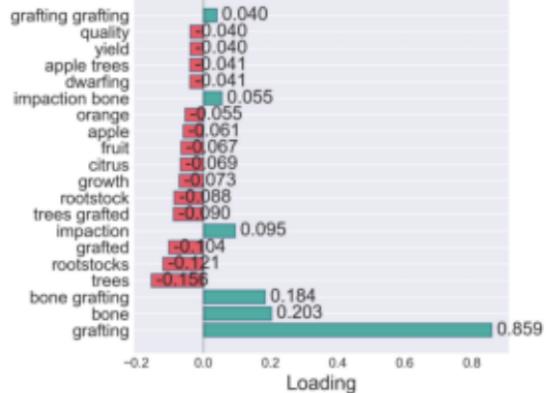
PCA Loadings Heatmap (Top Words)



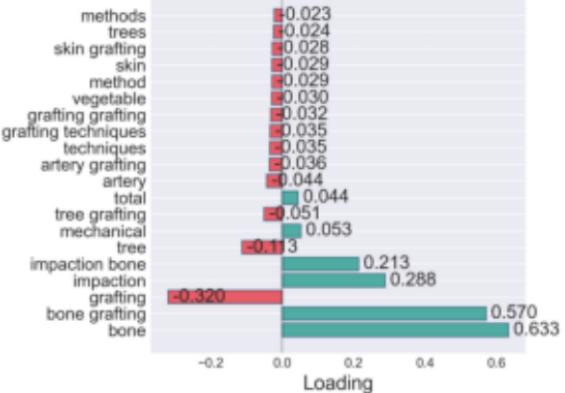
# Top Words per Principal Component

## PCA Loadings Barplots

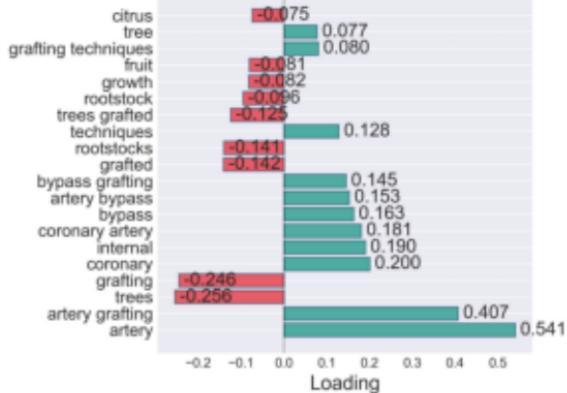
**PC1 (6.4% variance)**



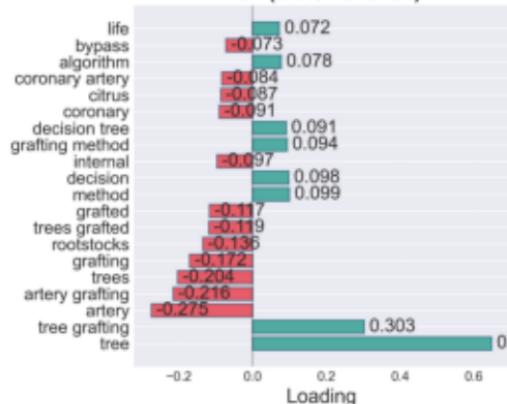
**PC2 (4.0% variance)**



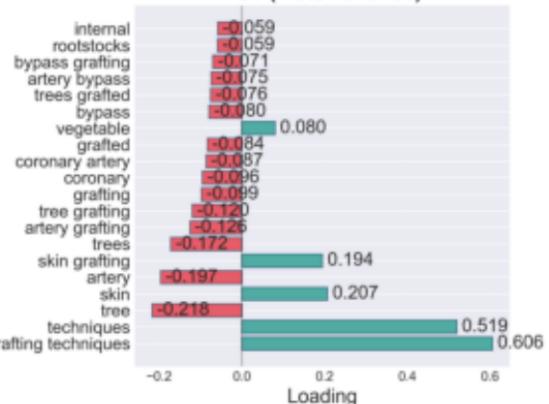
**PC3 (2.1% variance)**

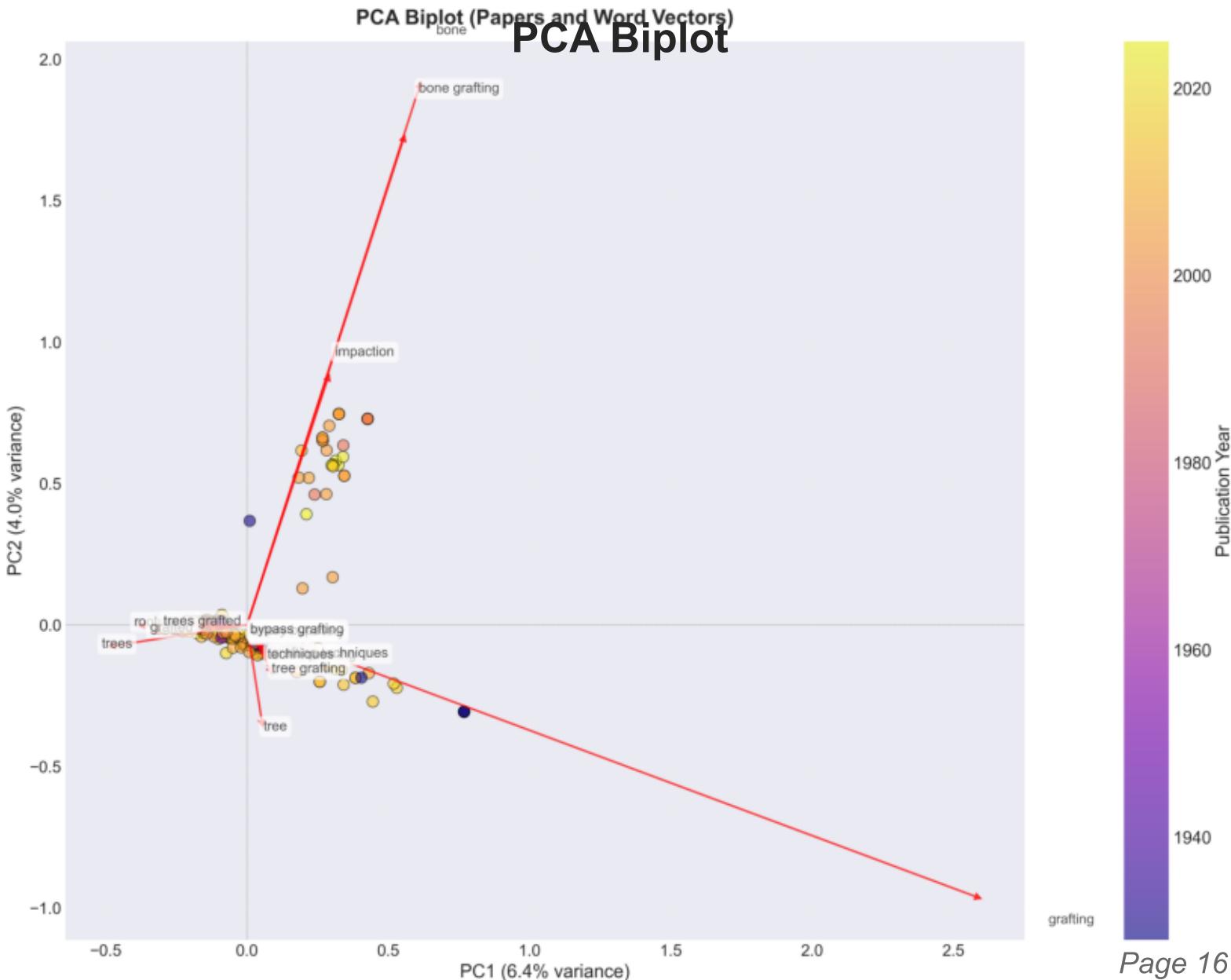


**PC4 (2.0% variance)**



**PC5 (1.5% variance)**



PCA Biplot (Papers and Word Vectors)  
bone

## Word Vectors in Principal Component Space

