

COLLEEN'S COMPOSTS 2023

Table 1 shows composts made by Colleen in 2022 and 2023. Figure 2 shows Colleen's Composts versus few other home made high-quality composts. All piles were made using local high quality ingredients and Dr. Elaine Ingham's methods for BioComplete Compost. AB is a compilation of two piles made in July and August 2022. It has aged well and shows excellent numbers of fungi and protozoa. Of the 2023 piles, A (made in April) contained the greatest amount of life in general, with very high fungal and protozoan numbers. Piles B and C were made July 18. While numbers are good, they should improve with age. Pile C is reserved as a mother pile and for next year. All piles meet Dr. Ingham's minimum ranges for different organisms in BioComplete Compost (Table 2). When choosing a compost to suit your needs, refer to Figure 2 for F:B ratios for different plant successional stages.

Table 1. Number of soil microorganisms in four different Colleen's Composts	2022 AB	2023 A	2023 B	2023 C
Bacterial Biomass (µg/g)	1614.096	6749.856	5319.18	1283.94
Bacterial Standard Deviation Biomass (µg/g)	200.927	793.172	733.68	565.338
Bacterial Standard Deviation as Percentage of Mean	12.40%	11.80%	13.80%	44.00%
Actinobacterial Biomass (µg/g)	1.987	1.242	4.802	5.878
Actinobacterial Standard Deviation Biomass (µg/g)	1.385	2.111	2.511	2.991
Actinobacterial Standard Deviation as Percentage of Mean	69.70%	170.00%	52.30%	50.90%
Fungal Biomass (µg/g)	759.699	3048.516	589.077	1717.557
Fungal Standard Deviation Biomass (µg/g)	619.24	4311.97	606.44	923.512
Fungal Standard Deviation as Percentage of Mean	81.50%	141.40%	102.90%	53.80%
Fungal Average Diameter - Weighted Mean (um)	4.07	6.355	3.653	4.679
F:B Ratio	0.47	0.452	0.111	1.332
Total Beneficial Protozoa (number/g)	1406220	1711920	1182040	1182040
Total Beneficial Protozoa Standard Deviation (number/g)	685083	363142	265723	245408
Total Beneficial Protozoa Standard Deviation as Percentage of Mean	48.70%	21.20%	22.50%	20.80%
Flagellates (number/g)	794820	672540	468740	326080
Flagellates Standard Deviation (number/g)	263762	234591	154539	232368
Flagellates Standard Deviation as Percentage of Mean	33.20%	34.90%	33.00%	71.30%
Amoebae (number/g)	611400	1039380	713300	855960
Amoebae Standard Deviation (number/g)	534368	377168	297087	91142
Amoebae Standard Deviation as Percentage of Mean	87.40%	36.30%	41.60%	10.60%
Bacterial-feeding Nematodes (number/g)	1875	250	1000	250
Fungal-feeding Nematodes (number/g)	375	250	250	0
Predatory Nematodes (number/g)	0	0	0	0
total beneficial nematodes	2250	500	1250	250
Oomycetes Biomass (µg/g)	0	0	40.496	0
Oomycetes Standard Deviation Biomass (µg/g)	0	0	90.551	0
Oomycete Standard Deviation as Percentage of Mean	0.00%	0.00%	223.60%	0.00%
Oomycetes Average Diameter - Weighted Mean (um)	0	0	5	0
Ciliates (number/g)	0	0	0	0
Ciliates Standard Deviation (number/g)	0	0	0	0
Ciliates Standard Deviation as Percentage of Mean	0.00%	0.00%	0.00%	0.00%
Root-feeding Nematodes (number/g)	0	0	0	0

NOTES

Bacteria highest in Pile A, then B

Fungi is highest in Pile A, then C

F:B Ratio highest in Pile C, then 22AB, then Pile A

Total Beneficial Protozoa highest in Pile A then AB

Nematodes highest in Pile 22AB then B

Detrimentials not a concern in any pile

Table 2 - Minimum Biological requirements for BioComplete™ Compost

Bacterial Biomass	135 µg/g compost
Fungal biomass	135 µg/g compost
F:B ratio	Equal to or greater than 0.3:1
Protozoa	10,000/g compost
Beneficial Nematodes	100/g compost
Ciliates	must be less than 5/drop at 1:5 dilution

Credit: 2023 Soil Foodweb School LLC.



Image 1. From Right to Left, Piles 2022AB, 2023A, 2023B.



Image 2. Front: Pile 2023C (Reserved)

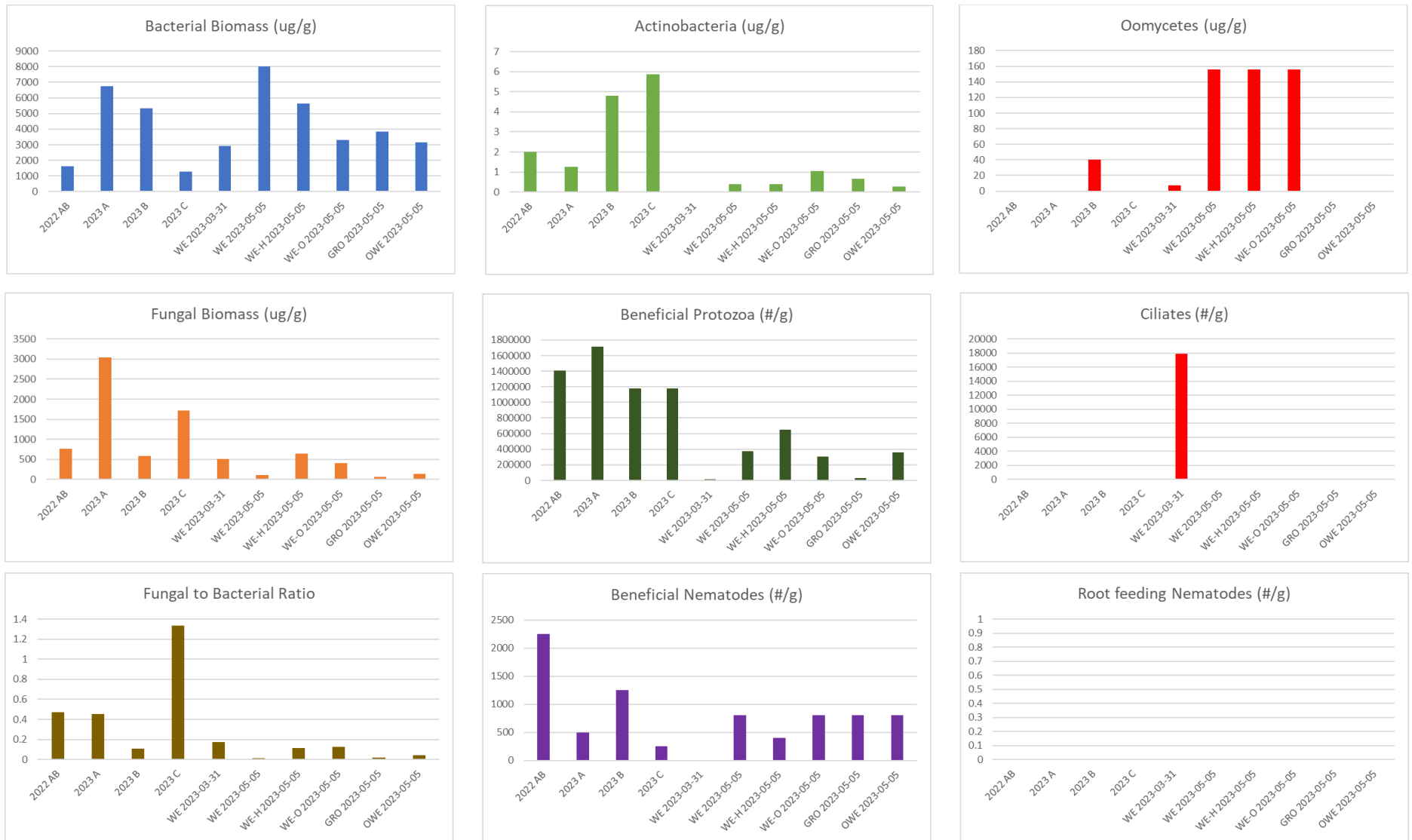


Figure 1. Colleen's Composts 2022 and 2023 versus other composts 2023

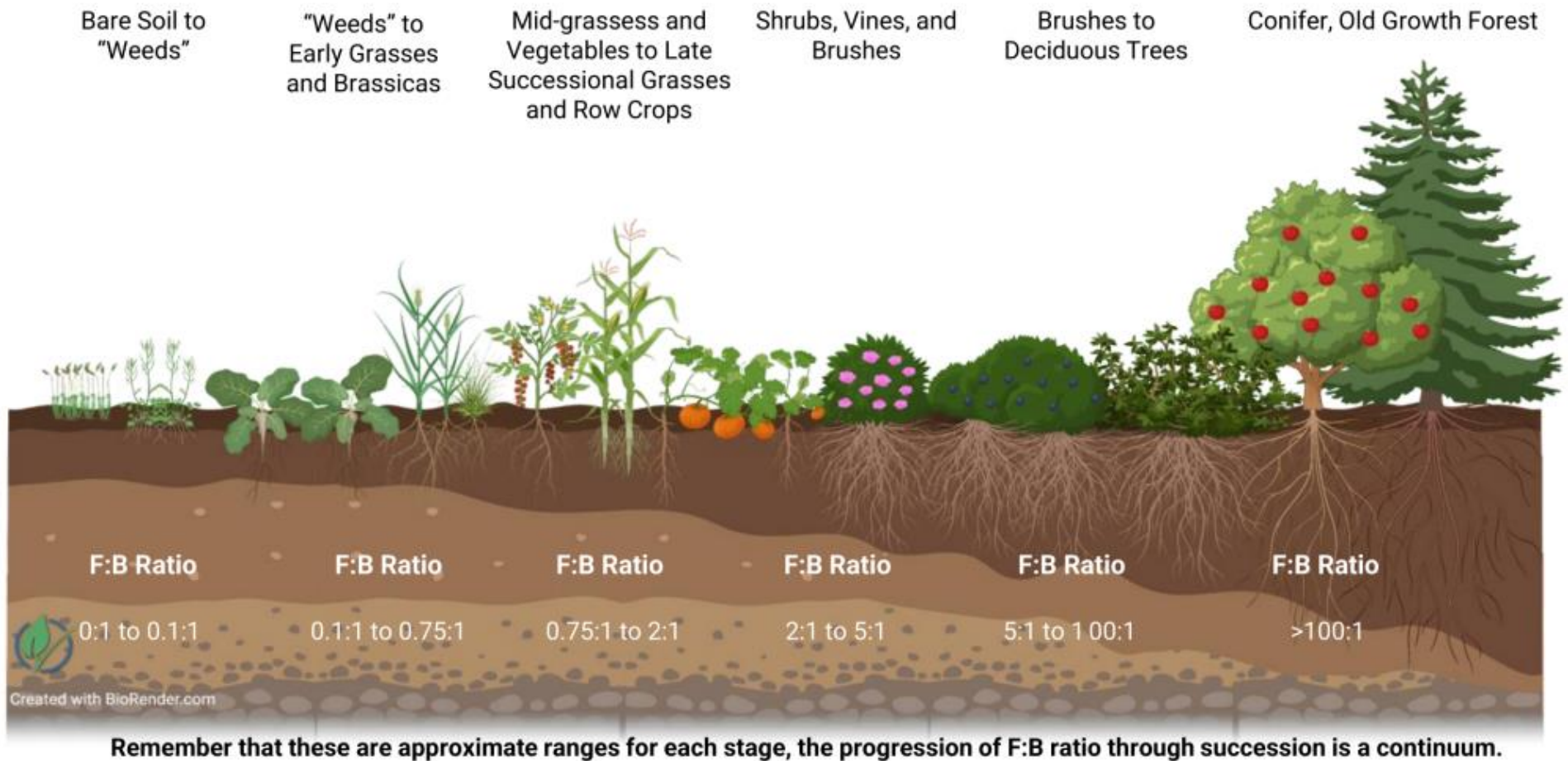


Figure 2. F:B Ratios for different types of plants, Credit: 2023 Soil Foodweb School LLC.