COI Barcoding

Performed by the MR DNA lab, the purpose of this metagenomic analysis was to identify and compare species of vertebrates and invertebrate animals present in Fish Brew Bold FLO, Fish Brew Rise & Thrive, and Fish Brew Trifecta. The top genera per kingdom or domain are recorded below.

Fish Brew Bold FLO results gave 218 unique species from the kingdoms of metazoa, fungi, and plantae, and the domain eukarya. Of 69,767 total read hits, species in the domain eukarya make up 61% of read hits, metazoan species make up 30% of read hits, fungi make up 7% of read hits, and plantae species make up 2% of read hits. In total, 56 unique genera of eukarya, 88 unique genera of metazoa, and 18 unique genera of fungi were identified.

COI Barcoding (February 2022)					
	Genera Name	Relative Abundance	Unique Matches Frequency		
Eukarya	Lagenidium	21.40%	9042		
	Pyropia	15.25%	6442		
	Gomphonema	10.51%	4442		
	Cochliopodium	6.91%	2920		
	Phytophthora	5.34%	2255		
	Aphanomyces	3.43%	1451		
Fungi	Pluteus	27.79%	1441		
	Synchaetomella	23.82%	1235		
	Suillus	21.62%	1121		
	Psathyrella	11.40%	591		
Metazoa	Balella	22.92	4846		
	Setobaudinia	21.02	4443		
	Pristina	12.03	2543		
	Scopalina	4.04	855		
Fish Brew Product(s): Fish Brew Bold FLO, Rise & Thrive, Trifecta					

Fish Brew Rise & Thrive results gave 175 unique species from the kingdoms of metazoa, fungi, plantae, and the domain eukarya. Of 152,317 total read hits, species in the domain eukarya make up 52% of read hits, metazoan species make up 47% of read hits, fungi make up 1% of read hits, and plantae species make up 0.1% of read hits. In total, 40 unique genera of eukarya, 77 unique genera of metazoa, and 12 unique genera of fungi were identified.

COI Barcoding (March 2022)					
	Genera Name	Relative Abundance	Unique Matches Frequency		
Eukarya	Plocamium	30.90%	24573		
	Pythium	30.08%	23923		
	Lagenidium	15.16%	12059		
	Cochliopodium	8.76%	6966		
	Dictyota	7.71%	6133		
	Phytophthora	1.57%	1248		
Fungi	Ganoderma	78.12%	857		
	Entoloma	11.30%	124		
	Gliocladium	4.19%	46		
Metazoa	Hymeraphia	79.15	56588		
	Xiphinema	4.96	3546		
	Crucigera	4.35	3113		
Fish Brew Product(s): Rise & Thrive, Trifecta					

Fish Brew Trifecta results gave 230 unique species from the kingdoms of metazoa, fungi, plantae, and the domain eukarya. Of 126,139 total read hits, species in the domain eukarya make up 55% of read hits, metazoan species make up 43% of read hits, fungi make up 1% of read hits, and plantae species make up 1% of read hits. In total, 43 unique genera of eukarya, 112 unique genera of metazoa, and 12 unique genera of fungi were identified.

COI Barcoding (March 2022)					
	Genera Name	Relative Abundance	Unique Matches Frequency		
Eukarya	Parvamoeba	54.87%	38146		
	Cochliopodium	23.01%	15997		
	Herposiphonia	4.47%	3110		
	Pyropia	3.68%	2557		
	Achlya	3.29%	2286		
	Pythium	2.32%	1612		
Fungi	Paxillus	22.48%	185		
	Ganoderma	21.39%	176		
	Cortinarius	17.86%	147		
	Albatrellus	14.95%	123		
	Psathyrella	12.15%	100		
	Clitocybe	5.71%	47		
Metazoa	Parvamoeba	54.87%	38146		
	Cochliopodium	23.01%	15997		
	Herposiphonia	4.47%	3110		
	Pyropia	3.68%	2557		
	Achlya	3.29%	2286		
Fish Brew Product(s): Trifecta					