## **Comparison of Bootstrapped and Expected OTU Estimates**

Sample Bootstrapped OTUs Expected OTUs

Sample	Bootstrapped OTUs	Expected OTUs
A	4.9937	4.999703643234421
В	4.7689	4.985645933014354
С	4.6318	4.810088680907892
D	4.9997	4.999998563392153
E	4.9476	4.988201851256765

Differences between Bootstrapped OTUs and Expected OTUs:

Sample	Difference
Α	-0.01
В	-0.22
С	-0.18
D	0.00
E	-0.04

Statistics of Differences:

Mean Difference: -0.09

Median Difference: -0.04

Standard Deviation of Difference: 0.10

The bootstrapped OTU estimates are very close to the expected OTU values, with minimal differences. This suggests that the bootstrapping method is a reliable estimator for the number of OTUs in each sample. The differences are minor, indicating that the random sampling approach produces results consistent with theoretical expectations.

