



S2 Fig. Effect of sampling effort on estimates of ANOSIM R and PerMANOVA R^2 effect sizes and 95% confidence intervals. Sampling effort represents random subsamples of each comparison group with replacement. ANOSIM R (grey) and PerMANOVA R^2 (red) values were calculated with Jaccard dissimilarity and 95% confidence interval based on 1000 subsamples. Jaccard indices were calculated with CSS normalized OTU tables. a) Comparison of FFE communities between bases and tips of *P. taeda* needles at five-sample intervals from five to 60 samples each. b) Comparison of FFE communities between *P. torreyana* needles between different geographic locations (Santa Rosa and San Diego, CA) at one-sample intervals from three to 14 samples each.