Tree scale: 1 \vdash **Categorical annotation** Depth correlation p<0.05 (empty=decresing, filled=increasing) Depth group t-test p(fdr)<0.05 (empty=decresing, filled=increasing) SpongEMP (fille=enriched, empty =not enriched, absent=not checked) positive correlation with barettin (filles= significant, empty=not significant and/or negative, absent=nto enough data) **Ecotypes** Connections indicate ecotypes (sequence similarity > 97% and opposing depth response)