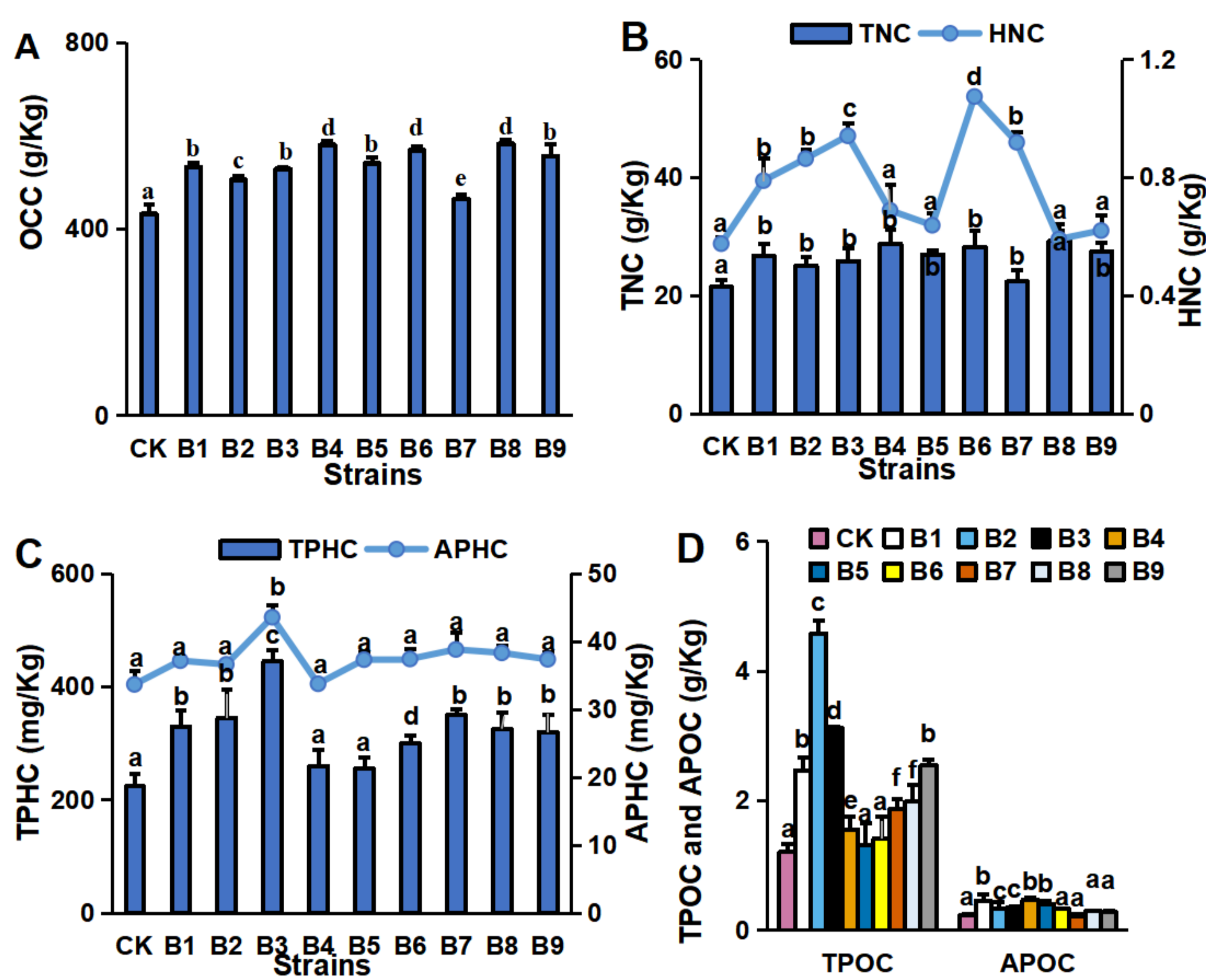
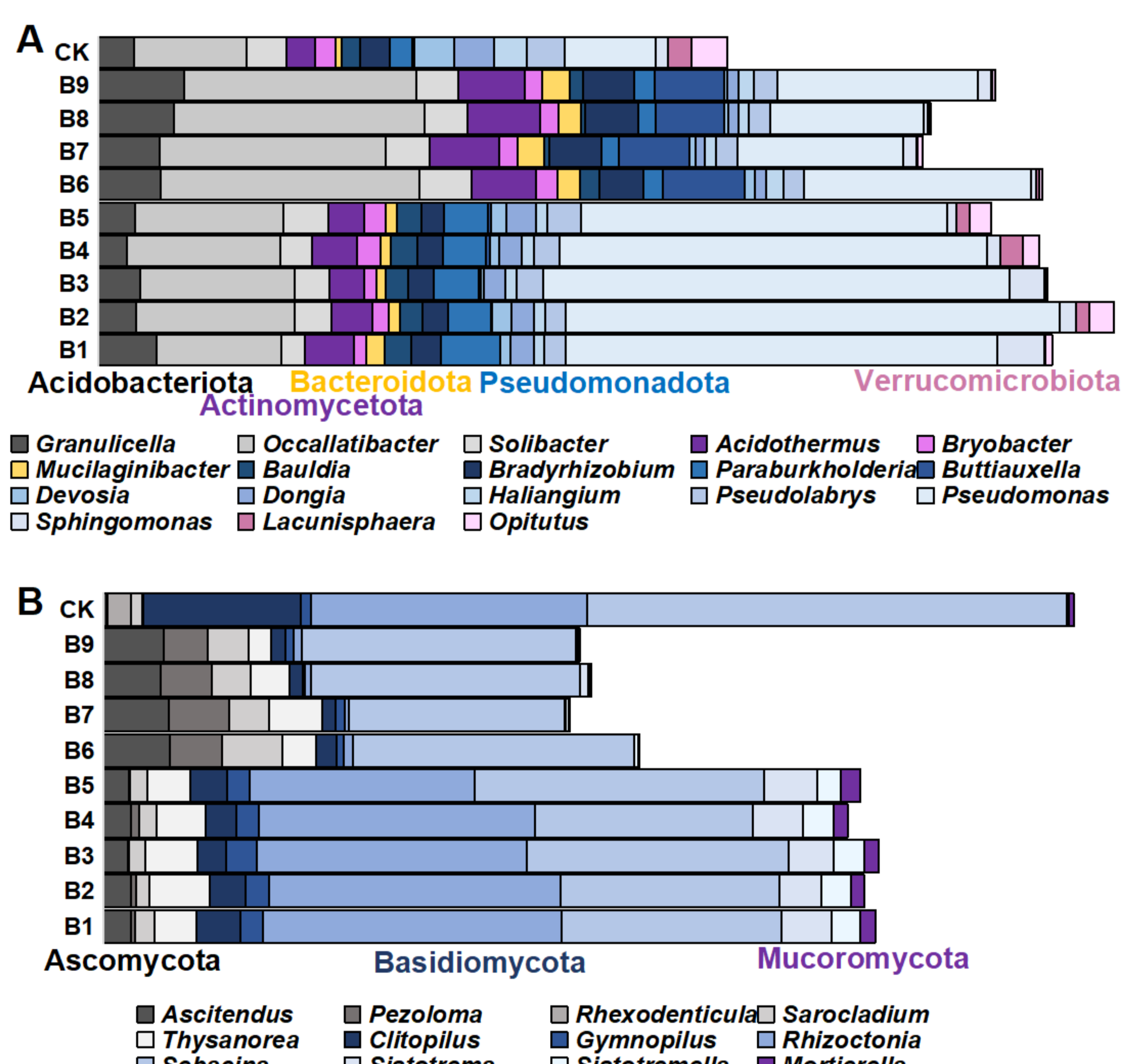


# Effects of Plant growth-promoting rhizobacteria on blueberry growth and rhizosphere soil microenvironment

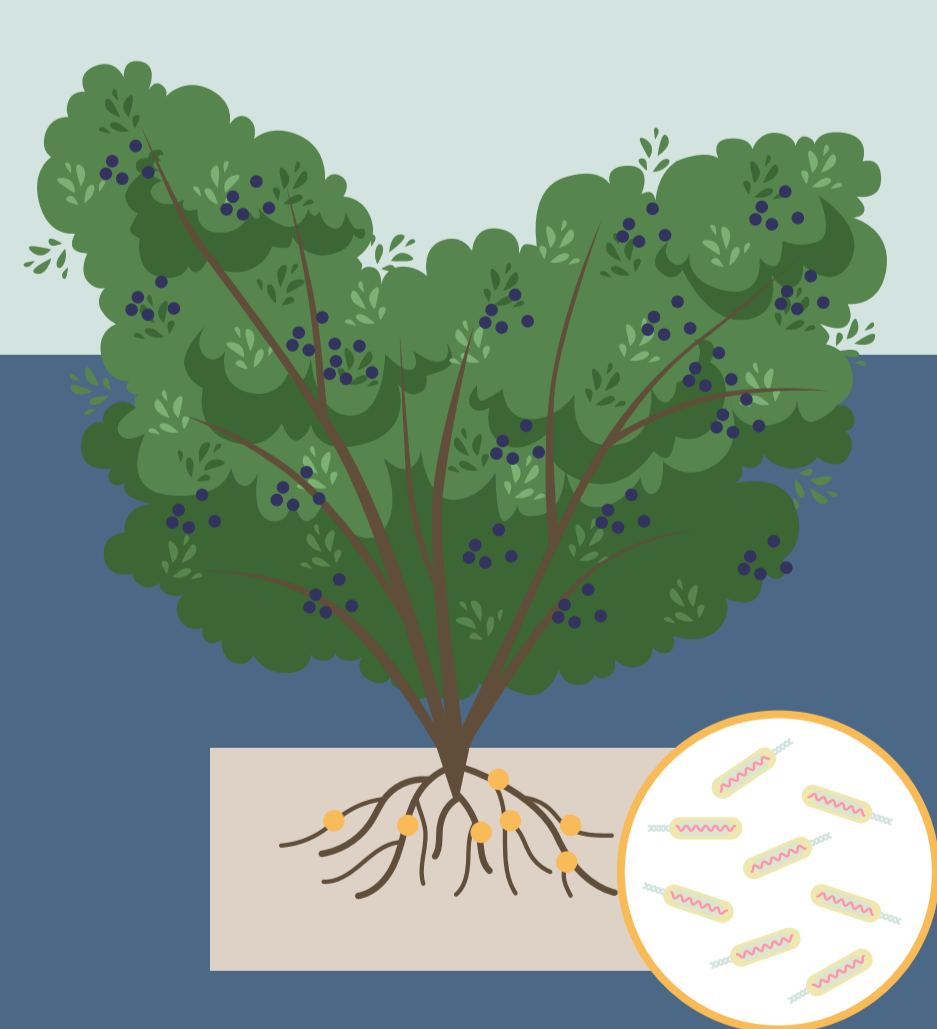
In this study, blueberry plant growth was promoted by irrigating the rhizosphere with nine growth-promoting rhizobacteria strains belonging to the genera *Buttiauxella* and *Pseudomonas*. The rhizospheric microenvironment and soil nutrients demonstrated a close relationship with these strains. Generally, the rhizosphere soil microbial community structure changed following root PGPR irrigation, increasing the amount of rhizosphere soil elements that are beneficial to plant growth..



**Figure 2.** Nutritive element contents in blueberry cutting-seedlings rhizospheres. Organic carbon content (OCC) (A), total nitrogen content (TNC) (B), hydrolysable nitrogen content (HNC) (B), total phosphorous content (TPHC) (C), available phosphorous content (APHC) (C), total potassium content (TPOC) (D), and available potassium content (APOC) (D) in blueberry cutting-seedlings rhizospheres. \*Bars with different letters indicate a significant difference between the data ( $p < 0.05$ ).



**Figure 3.** The distribution of microorganism with relative abundance greater than or equal to 1% in blueberry cutting-seedlings rhizospheres. (A) and (B) are bacterial genus and fungal genus with relative abundance greater than or equal to 1% in the soil samples.



The rhizospheric microenvironment and soil nutrients demonstrated a close relationship with growth-promoting rhizobacteria strains.

