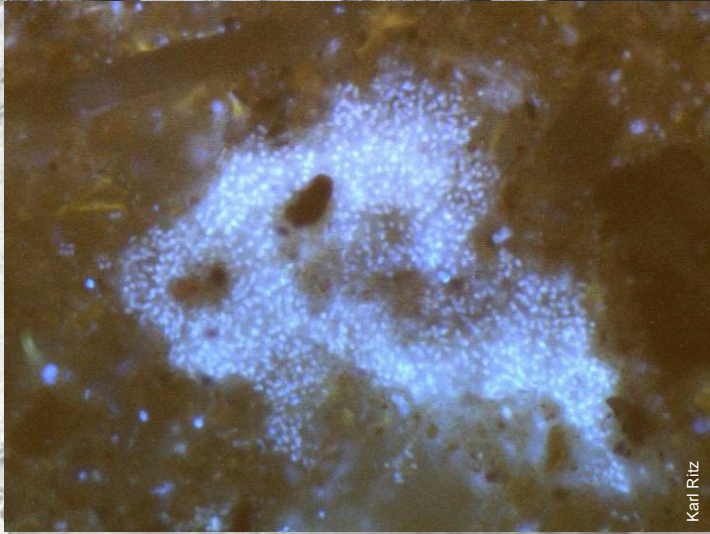
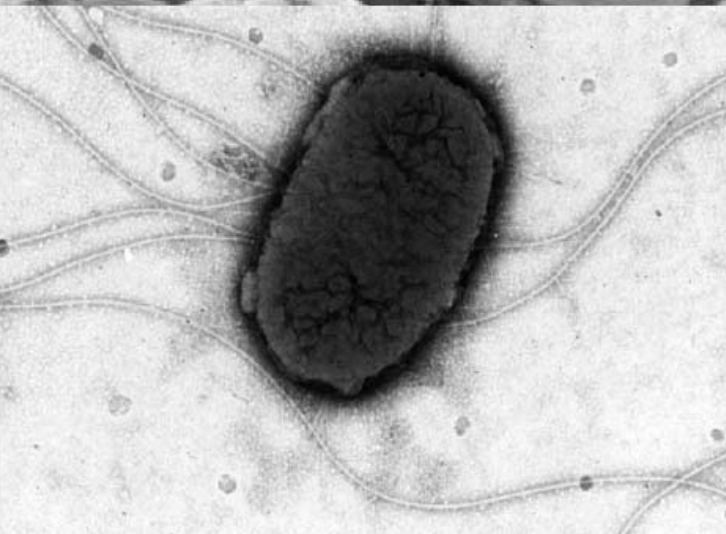
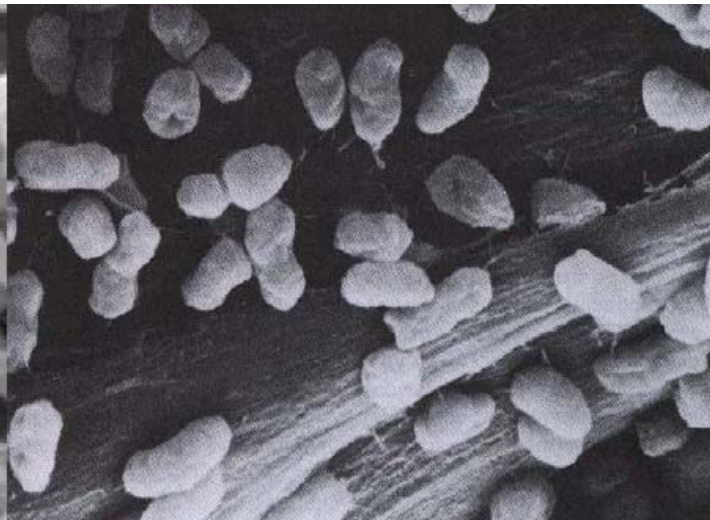
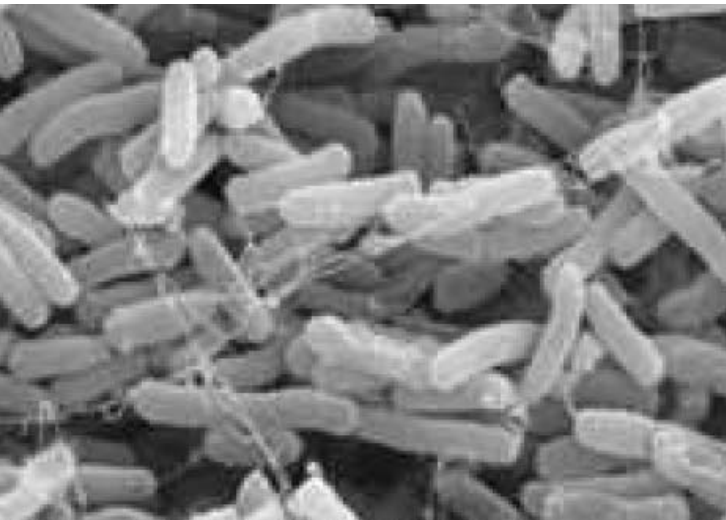




BACTERIA: MINUTE ENGINES OF LIFE

Bacteria are tiny, one-celled organisms – generally 1 μm wide (0.000001 mm!) and a little longer in length. Bacteria are not visible to the naked eye but they are present everywhere!



Karl Ritz

Most bacteria are decomposers that consume carbon compounds, such as fresh plant litter. By this process, bacteria convert energy in soil organic matter into forms useful to the rest of the organisms in the soil food web. Some bacteria can break down pesticides and pollutants in soil. Bacteria are especially important in immobilizing, or retaining, nutrients in their cells, thus preventing the loss of nutrients, such as nitrogen, from the rooting zone.

Some bacteria affect water movement by producing substances that help bind soil particles into small aggregates. Stable aggregates improve water infiltration and the soil's water-holding ability.