A single teaspoon of productive soil generally contains 1 BILLION BACTERIA.

Therefore, every acre of soil contains ONE TON OF BACTERIA.

This means that the soil covering the farmed area of the earth (50 million km²) contains 12.5 BILLION TONS OF BACTERIA with 2.6 x 10²⁹ bacterial cells.

Bacterial biofilms are involved in essential plant processes. They colonise plant roots, stimulate growth, recycle nutrients and control pathogens.

Biofilms are therefore an integral part of the WORLD’S $3,700BN OF AGRICULTURAL ACTIVITY.

Bacteria can also cause diseases of plants leading to the use of ANTIBACTERIAL PRODUCTS IN AGRICULTURE, particularly fruit and vegetables and can be applied to foliage, the soil or even injected into trunks.

The global market for these materials is estimated to be $10.4BN.