



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 km<sup>2</sup>) contains

**12.5 BILLION TONS OF BACTERIA  
WITH 2.6 X 10<sup>29</sup> 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

