

## **AEA Core Concept #14**

Unlock your soil's hidden potential.

We're all aware of the kinds of hidden intellectual or physical reserves that people possess, latent capabilities that we all fail to tap into. The same is true for soils, especially when it comes to mineral reserves.

Many North American soils contain high levels of phosphorus, potassium and other elements as part of the soil mineral matrix. These are the elements that mainstream agricultural models consistently fail to use but can be accessed using regenerative agricultural systems.

During the bacterial digestive process of mineralization, bacteria digest root exudates, primarily sugars, amino acids, and other soluble compounds that the plant sends to the roots to feed soil microbiology. Sugars, however, contain no minerals, so the digesting bacteria pull minerals from their soil matrix to build their own cells and bodies. In this way, minerals are made available to the plant. It follows, then, that the presence of a very aggressive microbial population in the rhizosphere leads to plants with high energy levels. In fact, there will be so much energy that plants will begin storing the excess in the form of lipids, as you can see in this picture of a cluster of tomatoes with a glossy, waxy sheen on their leaf surface and high levels of fruit uniformity, tell-tale characteristics of a well-functioning digestive system.

