



Ag Microbes.com

New Technology for Agriculture

UNIQUE BIO TECHNOLOGY

Since the late 1980's, microbiologists developing **AgMicrobes** products have been collecting many different species of microbes from unique and niche environments in the United States, Canada, South Africa, and Trinidad. Isolating individual species from unique and niche environments increases the probability that the microbial species will have acquired additional traits and abilities that allow them to work faster, survive longer, and perform additional biochemical reactions that other microbes of the same species cannot. This is adaptive change caused by natural selection. Genetic engineering can sometimes achieve the same goal; however, other necessary traits can be lost in the process, and it is currently illegal to introduce genetically engineered species into the environment without years of testing and EPA approval. In fact we know of no cases where this has been approved. By collecting microbes from unique and niche environments, natural selection induces the necessary genetic changes. This is literally how nature works.

Additional changes can be introduced in the laboratory if necessary by placing various species in specific and controlled environments (stressed environments), then after millions of microbe generations, harvesting the biotechnology and using it as desired. We call this process "Forced Natural Selection". This process works especially well for microbes because under the right conditions most microbes can double in population every 20 minutes. The results of this "forced" natural selection are stress acclimated microbes capable of performing the biochemical tasks required to achieve success in specific agricultural product applications.

In addition to having superior microbes, **AgMicrobes** products have been developed employing fermentation techniques that allow plasmid sharing, i.e. genetic sharing among similar species that results in more robust biotechnology that is capable of performing specific tasks better, and working synergistically together in all agricultural applications.

AgMicrobes products use groups of microbes. Single microbes can perform certain tasks very efficiently, however complex environmental factors cannot be foreseen, therefore **AgMicrobes** products use multiple species for redundancy even for specific tasks, as well as "helper" microbes that metabolize (consume) the waste products of the principle microbes to ensure rapid and efficient destruction of targeted compounds. The results of these techniques ensure that our products work rapidly and efficiently in a multitude of agricultural settings.

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