Will combining ‘microbials’ and biotech be next big thing in agriculture?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

When the word “biotech” first leapt onto the agri-food scene, the optimism surrounding those first innovations was undeniable. Now, two decades after those first traited plants began appearing in fields in North America, we are beginning to see a new opportunity, based on microbes, which could rapidly eclipse many of our current limitations.

The U.S. EPA has adopted a straightforward definition: “Microbial innovation is a micro-organism (bacterium, fungus, virus or protozoan) that can be used for controlling pests or enhancing plants. It’s a living micro-organism and the substances produced by the micro-organisms.”

“The funny thing about microbial biotech is that it’s happening right now, and it’s been happening since the dawn of agriculture and the dawn of life,” says Whale. “Single-celled organisms, microbes, fungi, bacteria and viruses (to some extent) are interacting with more complex organisms and finding symbiotic relationships where a microbe can survive by improving a host’s chances of surviving.”

Where microbial biotech is really getting started, Whale says, is in understanding the complexities within those microbial ecosystems, and then learning to manipulate and promote their symbiotic relationships.

Dr. Pam Marrone, chief executive officer and founder of Marrone Bio Innovations says microbial biotech will not replace current plant biotech applications. The collaborative approach, Marrone adds, will do more to extend the life of existing plant biotech applications.

Agriculture’s challenge remains how to find that median between being productive enough to feed the world while allaying the fears of a consuming public that’s largely out of touch with modern farming practices.

It could be that microbial biotech is the opporunity that plant biotech can use to create balance in the agri-food industry.

Read full, original post: The next ‘biotechnology’