

An alternative to industrial farming

Probiotics restore soil and water, support crops, improve personal and livestock health, and control odors.

Interview with Matthew Wood, CEO of SCD Probiotics
(Interviewed by Bronislaw Tumilowicz)

We know that effective microorganism (EM) technology was developed by Japanese professor of horticulture Teruo Higa and that it consists of specific strains of beneficial microbes. This technology has been used for soil restoration and plant disease control. Have you met professor Teruo Higa?

Yes, but we have not only met. I received a Master of Science degree in Bioproduction at the University of Ryukyus in Okinawa, Japan under the direction of Dr. Teruo Higa.

Are the technologies that your company applies learned from Japan or have they been developed in the United States?

Although we used some of Higa's experience, our company utilizes proprietary technologies. We have developed three types of mother cultures in the United States. SCD has implemented and promoted them worldwide. We have licensees in 26 countries, including Poland. SCD hosts and attends conferences and symposia frequently. We approach farmers to convince them to apply natural methods. One of the methods we encourage is the use of SCD Probiotics and its beneficial microbes to restore human and environmental health.

How efficient is the application of SCD Probiotics?

The efficiency is high and has been proven by scientific research conducted in the United States and in other countries where our technologies have become increasingly common. The efficiency of probiotic products is clear when applied to enhance crops, to restore soils, to aid municipal waste disposal, and to supplement the diets of both humans and animals. Its efficiency has been indicated through various indexes. One index analyzes yield increase after applying the product, and improvement in crop quality can also be measured. The most distinct and understandable factor, however, is increasing income and profits.

What do you mean when you say high efficiency? Of what magnitude is the growth?

It depends on crop, production type, and which of the SCD Probiotics products are applied. Farmers from Missouri who grow corn consider as the most important example a local farmer whose farm now generates more income this year than it did last year. Research results from the European Union show that tobacco yield can be increased by 10% to 20%. There is other data that compares the costs that farmers incur. One particular farm in Poland where 175 acres of rape is grown indicated that production costs dropped by \$120 per acre after the farmer replaced standard fertilizer with SCD products.

The cost reduction that stems from using probiotic products indicates that these products are less expensive than traditional chemical fertilizers.

They are not only cheaper, but they are more versatile and have a beneficial impact on the environment. They produce advantageous effects in plants by immunizing them and they restore soil by neutralizing noxious chemical compounds that have been deposited.

Which microbes are used?

SCD Probiotics contain mostly lactic acid bacteria, phototrophic bacteria, and other microbes such as yeast and fungi which are ubiquitous in natural, healthy environments. Generally speaking, EM is a technology consisting of numerous strains of diverse microbes. SCD Probiotics is based on several types of mother cultures that I have developed. Each mother culture is a complex of probiotic microbes. All technologies we apply are natural and environmentally safe. They are certified and admitted for application in each country where we provide them. In Poland, they are certified by National Sanitary Authorities. These authorities admit some of these products as dietary supplements.

It seems that the beneficial effects of probiotic products are not widely known yet. How many Polish farmers currently apply microbial technology?

Currently the figure amounts to nearly 10,000 and is still growing. Among users, one can find from small and medium farmlands to large ones that include more than 10,000 acres of land. Our Polish licensee, ProBiotics Polska, operates a nationwide network of regional centers where ready-to-use products are manufactured with the use of mother cultures. The goal of ProBiotics Polska is to produce mother cultures, to extend the range of secondary (ready-to-use) products offered, and to conduct scientific research on products as alternatives to chemical fertilizers, pesticides, and plant treatment chemicals.

There is obviously some investment needed to establish a regional center.

Certainly. One needs to have human resources, to establish a facility, and to comply with standards. These are minimum requirements for manufacturers to be ready to use products that are based on SCD mother cultures.

Is SCD Probiotics exclusively an agricultural solution in Poland?

No, it is not. ProBiotics Polska also promotes the KWADRANT-EkosystEM method. This method utilizes SCD products and is implemented to improve the economic performance of wastewater treatment plants, sewage systems, composting plants, and dump sites. This need is extraordinarily important in Poland as it is part of the European Union where, according to 99/31/WE directive, land-filling of non-solid or organic waste is to be dramatically decreased. Before this directive, more than 70% of wastewater sludge had been placed in landfills. According to the 99/31/WE directive, the sludge can still go in landfills as long as the sludge has organic matter content lower than 20%. This requirement can be met by adopting the KWADRANT-EkosystEM method. Currently several dozen WWTP, municipalities, and households have adopted this method.

Is there a chance that probiotics will be widely used?

That is our goal. I am currently spending a week in Poland as a guest speaker at conferences that are promoting the application of probiotics; I give lectures and present the technology. However, I think that the most beneficial events are when practicing people meet together and when farmers who utilize SCD Products present their knowledge and experience to other farmers attending the conference.

WWTP Technology Managers who have solved problems (i.e. sludge odor control and sludge disposal) as a result of SCD product application are the most credible to their colleagues running other treatment facilities. In my opinion, this is the best way to promote the idea of harnessing natural potential to restore personal health and the environment.

Matthew Wood

SCD Probiotics Founder, Chairman. Researcher and promoter of beneficial microbes since 1996; involved in developing new probiotic technologies in countries worldwide.