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IT'S ALL ABOUT SOIL

By Catherine Riungu





When you talk to Omry Karplus, *Product Development Director* at **Vicentia East Africa**, it doesn't take long to realize that he's not interested in selling products or quick fixes. What he wants passionately, insistently is a shift in how we think about farming. Not just how we plant, spray, or harvest, but how we value our most overlooked asset: the soil.

"Teaching farmers about nutrition is the most important thing in agriculture," he says without hesitation. "And I don't mean crop nutrition only. I mean the soil that's where it all begins."

With over 35 years of experience in the agricultural sector, Karplus admits he doesn't have all the answers. But what he does have is perspective the kind that only comes from watching patterns repeat, technologies evolve, and mistakes persist across seasons and continents.

"No one has all the answers. That's why I tell farmers invest in knowledge. Go online, go to YouTube, listen to agronomists, scientists and even fellow farmers. There is so much good information out there you just have to look for it."

He adds, "When I don't have an immediate answer, I research on a solution there is always a solution for all nature's problems."

But knowledge, he says, must also come with context. He cites a recent policy move by the Kenyan government: the banning of 77 pesticides, with another 200 under review. It's a necessary wake-up call.

"Soon, there will be fewer chemicals on the market. So what's the way forward? We must change the way we farm. We can't spray our way out of problems anymore."



He paints a concerning picture: tomatoes harvested hours after spraying, farmers resorting to cattle-dip pesticides to fight relentless pests like Tuta absoluta. It's not recklessness, he insists it's desperation, fueled by a lack of knowledge.

"Why do we even need all these pesticides?" he asks. "Because the crops are weak. And why are they weak? Because the soil is unhealthy. It all starts with the soil."

Here, Karplus shifts into what feels like his core message one he's delivered to farmers, consultants, and agri-businesses across the region: plants have natural defense mechanisms, but they only work when the plant is well-fed, and that feeding starts with the soil.

"Nature doesn't make mistakes. Pests and diseases exist to clean up weak plants. Just like hyenas in the wild clean up carcasses that's their job. If your plants are constantly under attack, it's not bad luck. It's a warning sign."

He explains how modern farming has damaged the delicate ecosystem in the soil the fungi, bacteria, and micro-organisms that used to work in partnership with plant roots.

"We've killed them with excessive fertilizer and pesticide use. For 40 years we've pushed chemicals into the soil and disrupted the conversation between plant and soil life. Now, the plants are silent. And sick."

To rebuild that natural conversation, Karplus emphasizes the role of beneficial microbes that are already present in healthy soils and must be encouraged, not eliminated.

"The soil knows how to take care of the plant but only if we stop interrupting it," he says.

He points to well-known microbial allies like Rhizobium spp., which form symbiotic relationships with legumes to fix nitrogen naturally; Azospirillum spp., which live freely in the soil and support root development; and Bacillus spp., known for promoting root elongation and stress resilience. Fungi like Trichoderma spp. not only enhance root growth but also help plants resist diseases, while arbuscular mycorrhizal fungi such as Glomus intraradices form intricate networks that increase nutrient uptake and water efficiency.



"These organisms are not just 'add-ons'," Karplus insists.
"They are the foundation. When we build soil biology, we give plants their natural tools to thrive."

One of his biggest frustrations is how misunderstood some critical elements are, especially calcium. While farmers are familiar with fertilizers like DAP and CAN, few understand that calcium which helps activate plant defense systems is often locked in the soil and unavailable to the plant.

"Kenya is calcium-deficient, but we rarely talk about it. Without calcium, your plant is like a house with no roof. It's exposed. It is weak and susceptible to attacks from pests and diseases. We respond by spraying more chemicals."

Karplus explains further, highlighting the role of endophytes and the amazing complexity of root systems. He describes how roots are constantly working, dissolving nutrients every 20 minutes to feed the plant. His message is simple and powerful: if we take care of the soil, the soil will take care of the plant.

"This is the only way to reduce chemical use in the long run healthy soil grows healthy crops that don't need constant protection."

He points to successful export farms in Kenya that are already shifting to bio-friendly products not because they're cheap (they're not), but because they reduce long-term pest and disease pressure. He calls for more use of organic matter, agricultural lime, cover crops, natural mulches, and even intercropping such as maize with beans, to naturally fix nitrogen.

"It's cheaper to inoculate bean seeds than to apply nitrogen fertilizers. But most farmers don't know that. It's this kind of knowledge that can change lives." For Karplus, investing in soil health isn't a trend it's a necessity. And it's especially important for farmers working their own land, where long-term sustainability matters.

"Your biggest asset as a farmer is your soil. If you take care of it, it will reduce your costs fewer fertilizers, fewer pesticides. But you have to start now."

AND THAT'S WHERE AGRITIGER COMES IN.

"We released Agritiger because we needed something to help open up the soil, unlock the micro-elements, and break down chemical residues. You use it once a year. That's it. It's part of the change."

For Karplus, Agritiger isn't just a product it's a symbol of a new approach to farming. One that begins with the understanding of natural systems, respects the biology of the soil, and restores the communication between plant and earth.

"Agritiger works by regenerating the soil's microbial life. It's a biological soil conditioner not a quick-fix pesticide, not a synthetic fertilizer. Think of it as a reset button for tired, chemically saturated soils."

He explains that in many farms, years of fertilizer and pesticide use have created what he calls "locked soil" compacted, acidic, and biologically silent. For Agri tiger the BIGGEST trait is salinity mitigation (the ability to break down sodium in the soil). This opens the door for nutrient absorption, especially Phosphorus, Magnesium and Calcium and Micronutrients that have long been present in the soil but unavailable to crops.



"The idea isn't to replace fertilizers completely," he clarifies. "It's about using them more effectively. Once the soil biology is restored, your fertilizers work better. Your plant uses less, wastes less, and stays stronger." But Vicentia's approach goes far beyond a single product.

"We are not a fertilizer company. We're a soil health company. We don't just sell solutions we teach farmers why things work. That's our mission."

At the core of Vicentia's philosophy is plant nutrition based on science and observation, not assumptions. That's why they emphasize soil testing, customized nutrient recommendations, and field-based demonstrations.

"It's not enough to tell a farmer to apply calcium or magnesium. You need to test the soil, understand the crop's needs, and build a nutrition program that makes sense. That's what we do."

One of Vicentia's standout tools is the use of biologicals living organisms that naturally support plant growth and protect against stress. Among them are a range of endophytes that colonize plant roots, boost immunity, and improve nutrient uptake.

"You don't need a chemical every time a leaf turns yellow," Karplus says. "Sometimes it's just a missing element or a stressed root. But to know that, you must understand how plants behave."

Their solutions also include microbial inoculants, humic substances, bio-activated calcium products, and specialized foliars designed to correct deficiencies quickly and gently. Many of these products are designed to work with existing fertilizer programs, enhancing performance rather than replacing it.

And in the long run, it's not just about better yields it's about sustainable profit.

"Farmers are spending more than ever on inputs. Fertilizers, pesticides, labor it's all going up. But if the soil is poor, the returns don't match. Our solutions help farmers reduce unnecessary costs by making every input more efficient."

He gives examples of export growers who've transitioned to Vicentia's programs: farms that once relied heavily on synthetic chemicals are now using microbial-based products with less spraying, better resilience, and higher quality produce.

Even avocado farms notorious for poor soil care are seeing gains from simple practices like mulching under the trees, using cover crops, and liming to reduce soil acidity.

"Tropical fruit trees like avocado have shallow roots. If you leave the soil bare, the sun bakes it and microbial life disappears. That's why cover is essential. But again, it starts with understanding."

Throughout the conversation, Karplus returns again and again to the same message: knowledge before inputs. Every product, every practice, every decision must be based on a clear understanding of how soil, plant, and micro-life work together.

"We are here to assist farmers but not with generic advice. Our answers are based on science, research, and what's happening in the field."

At the heart of Vicentia's strategy is something that's becoming rare in agri-business today: listening to farmers.

"Farmers are looking for solutions. And if you want to provide solutions, you have to understand their problems. That's what we do. We walk the fields with them. We see what's working and what isn't. Then we respond with solutions that make sense."



The Bottom Line?

As Karplus puts it:

"If you take care of the soil, the soil will take care of your crop." It's a simple truth, backed by decades of research and centuries of natural logic. And as Kenya and the region move into a future with fewer pesticides, changing climate patterns, and higher input costs, it may just be the truth that keeps farmers in business.

Across many farms, years of chemical build-up and salinity stress have quietly undermined soil health and with it, crop performance. But a growing number of growers are turning things around with Agri Tiger, a powerful soil conditioner from Agrichem Australia.

Designed specifically to tackle tough soil challenges, Agri Tiger works deep in the root zone to break down harmful chemical residues, neutralise excess salts, and open up compacted soils. The result is better root penetration, improved nutrient uptake, and stronger, more resilient crops. Farmers using Agri Tiger reports positive changes in soil health, better water movement, and more responsive crops, even under stress.

- Breaks down chemical residues
- Neutralises excess salts
- Improves soil structure and water absorption
- Boosts plant health and yield potential

In tough conditions, small changes below the surface can make a big difference above it. Agri Tiger is helping farmers reclaim their soils and harvests.

