HEART & SOIL MAGAZINE

ISSUE 7

Edible **Flowers** | *Sacred* **Bison** | *From Chef* **To Healer** | *Immune* **Boosters**

Rooted in Wisdom

HEDGEROWS
Trellis Systems

SOIL MICROBES
ROOT DEVELOPMENT

Coal-Roasted
BEETS

IFOAM
CELEBRATING 50 YEARS

REGENERATING
LAND & COMMUNITIES IN ONE GENERATION

HEART & SOIL MAGAZINE

ISSUE 7 ROOTED IN WISDOM

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Build Your
Microbial Biomass
Interview with Dr. Judy Fitzpatrick

A teaspoon of healthy soil contains billions of microbes.

Microbes feed the plants, strengthen their roots, and increase their yields. A plant sends signals to attract the microbes it needs at any given moment.

In chemical-free agriculture, there is a good marriage between plants and microbes. In a complex, self-regulating system, plants and microbes work harmoniously, nourishing each other.

The chemistry of a plant sends specific nutrients to attract microbes to strengthen its immunity. The plant is not only capable of diagnosing its needs, it also makes its own medicine.

When chemicals interfere with self-regulation, the plants are weakened.

What should you do to improve the health of your plants? Build your microbial biomass by building your soil.

Soil structure is the microbial home. A couple ways to build your soil structure are composting and cover crops. The roots in the soil are home to microbes. In nature, soil is covered, not fallow.

The global soil degradation and desertification affects us all.

The microbes found in soil are also found in our gut. The health of the soil impacts the nutritional value of our food and our health. The immunity of a plant impacts our own immunity. What we eat is essential to our own wellbeing.

By taking care of the land and our agriculture, we are also taking care of ourselves.

In this interview with Dr. Judy Fitzpatrick, microbiologist and diagnostic developer, we deepen into the importance of microbial biomass, the ratio of fungi to bacteria, plant - and human - immunity, and how to build soil structure.

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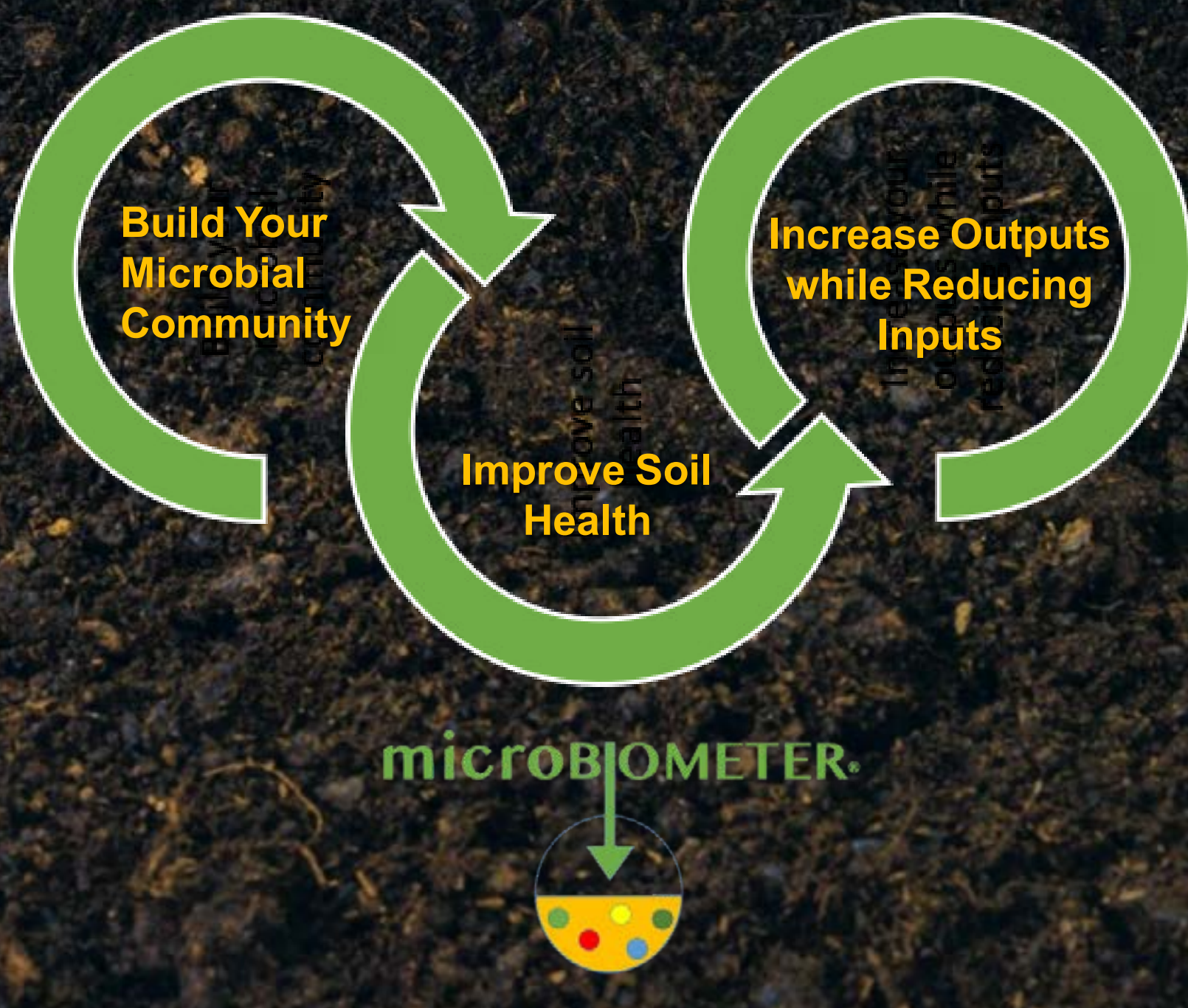
About Dr. Judith Fitzpatrick, Ph.D., Prolific Earth Sciences Founder and Principal Scientist

Dr. Judith Fitzpatrick is a microbiologist and a recognized leader in the development of on-site diagnostic tests. She was the founder and CEO of Serex from 1985 until its sale to a Canadian Pharmaceutical Company in 2002. At Serex, she developed more than 15 medical diagnostic tests with unique reagents and methods of testing.

Judy combined her expertise in diagnostic testing and manufacturing with her profound belief in the mission to help improve farming practices. She has over 15 published papers and holds 13 patents.

You know what grows above, we can tell you what grows below.

Determine your soil's health with a low cost, 20-minute, on-site soil test for microbial biomass and fungal to bacterial ratio.



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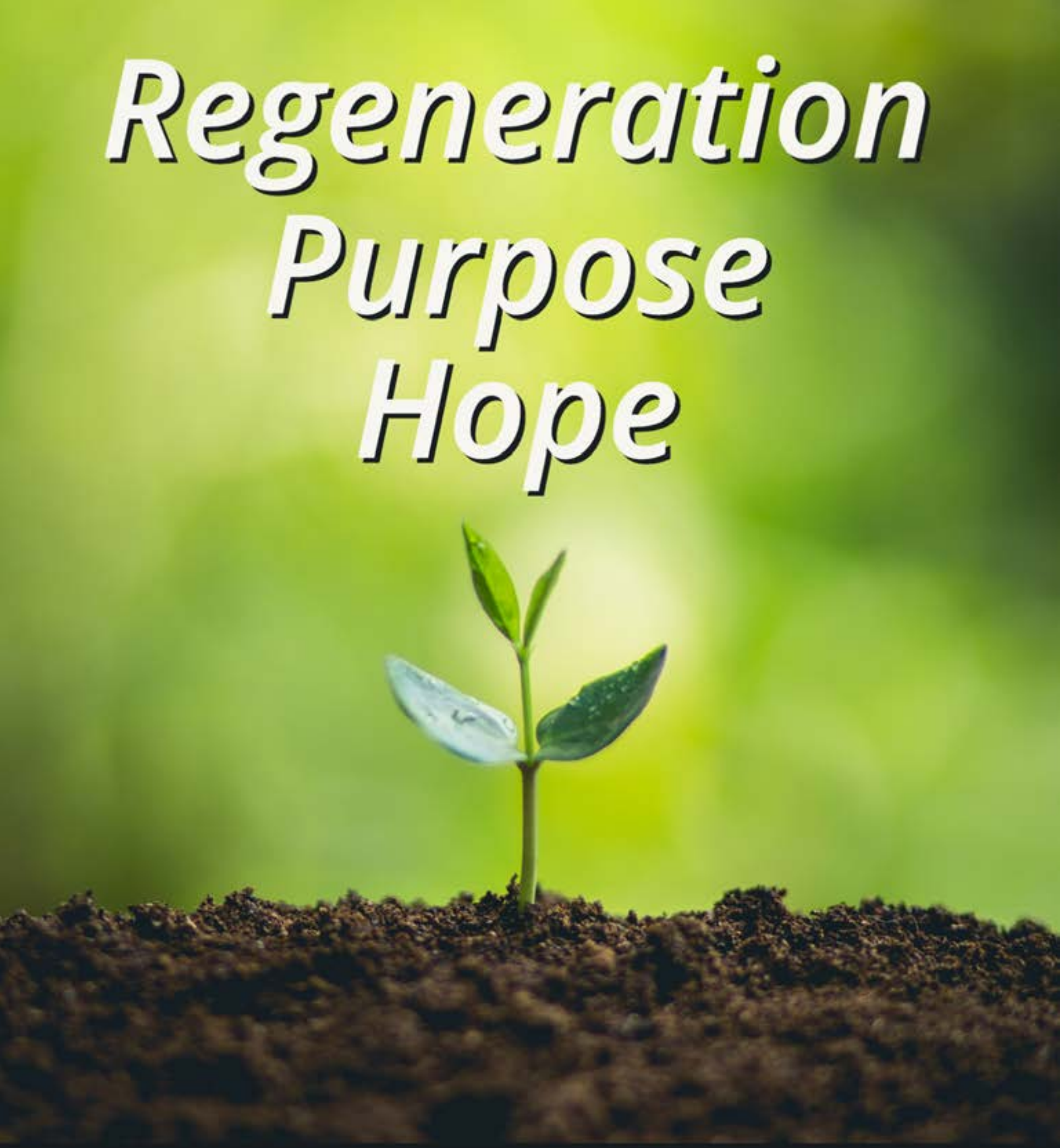

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