

Summary: Post-Season Treatment

Benefits of post-season treatments for soil health and regenerative agriculture

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Version 1.0A

## Why treat with Squid Juice post-season?

- Regenerative agriculture is a year-around process.
- Post-season application of Squid Juice promotes soil health by encouraging the growth of beneficial soil microbes and fungi.
- Beneficial microbes and fungi improve soil structure and quality by making soil more porous, increasing soil hydraulic conductivity, and improving nutrient retention and availability.
- Beneficial soil microbes and fungi also reduce disease pressure by competing with and predating soil-borne diseases.
- Squid juice contains a natural blend of amino acids, the building blocks of protein, which are an excellent source of microbe-feeding nitrogen.
- Unlike synthetic sources of nitrogen, amino acids are less prone to leaching and run-off; meaning more nitrogen stays in the soil, where it is needed. In fact, some amino acids, like lysine, histidine, & arginine, all of which are present in our Squid Juice product, have a positive charge, meaning unlike synthetic fertilizers, these molecules literally stick to the soil.
- The highly bioavailable nitrogen, as well as the phosphorous and potassium in the Squid Juice product, are an excellent source of soil nutrition needed to prime soil for next year's growing season.
- In addition to amino acids, the Squid Juice product contains natural fats, such as palmitic & oleic acid, which are known to reduce soil-borne diseases, and to promote soil health, microbial activity, and root growth.



- Finally, our product is rich in a rare form of chitin, a natural molecule that has been shown to increase NPK bioavailability and promote the growth of healthy disease-suppressing biocontrol bacteria and fungi and lower overall disease pressure.
- Beyond conjecture: the efficacy of Squid Juice, and its ability to promote soil microbial growth, and improve soil quality have been demonstrated by third-party research. Feel free to ask for more information!

## Literature:

- Moe, Luke A. "Amino acids in the rhizosphere: from plants to microbes." *American journal of botany* 100.9 (2013): 1692-1705.
- Arias, M. Enriqueta, et al. "Soil health: A new challenge for microbiologists and chemists." *International microbiology* 8.1 (2005): 13-21.
- Fan, Yanli, et al. "Chitin amendments eliminate the negative impacts of continuous cropping obstacles on soil properties and microbial assemblage." *Frontiers in Plant Science* 13 (2022): 1067618.
- Andreo-Jimenez, Beatriz, et al. "Chitin-and keratin-rich soil amendments suppress Rhizoctonia solani disease via changes to the soil microbial community." Applied and Environmental Microbiology 87.11 (2021): e00318-21.
- Chen, Wenwen, et al. "Effects of volatile fatty acids on soil properties, microbial communities, and volatile metabolites in wheat rhizosphere of loess." *Journal of Cleaner Production* 476 (2024): 143798.
- Brinton, William F. "Phospholipid fatty acid (PLFA) analysis: A robust indicator for soil health." Soil Biol. Biochem 48 (2020): 1621-1625.
- Ma, Kexin, et al. "Palmitic acid mediated change of rhizosphere and alleviation of Fusarium wilt disease in watermelon." Saudi Journal of Biological Sciences 28.6 (2021): 3616-3623.
- Kachroo, Aardra, et al. "An oleic acid-mediated pathway induces constitutive defense signaling and enhanced resistance to multiple pathogens in soybean." *Molecular Plant-Microbe Interactions* 21.5 (2008): 564-575.