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Virginia Tech Taking on Strawberry Yield and Application of Biofungicides in CEA

Sean Campbell

As we look back at this year's hottest award season, the USDA Specialty Crop Block Grant Program (SCGBP) announcements, let's take a moment to recognize some winners from this year's block of \$72.9 million in 2023 SCGBP funding. While the Grammy's, BAFTAs and Oscars will always have a place in our hearts, the selection of awards highlighted in this article are all about work proposed by Virginia Tech and the Virginia Cooperative Extension that shows great potential in the CEA field.

Increasing yield in greenhouse soilless strawberries using growth-promoting bacteria: Led by **Dr. B. Sajeewa Amaradasa** of the Institute for Advanced Learning and Research, the project will seek to partner with extension, industry and growers to assess the effectiveness of bacterial endophytes on yields of different strawberry cultivars grown in CEA facilities. Living inside the plants, these bacterial endophytes have been shown to increase stress and disease tolerance, and could be a significant advancement in increasing the viability of different CEA methods for growing strawberries. Given the interest in high-quality indoor grown berries generated by companies like Oishii, Bowery and Plenty, this research could have significant implications on improving viability of the different approaches taken by these companies.

Applying next-generation biofungicides in controlled environment agriculture: Centered around specific objectives of evaluating biofungicides as a method for controlling grey mold and downy mildew in strawberry and spinach production, respectively, assistant professor **Kaylee South** is proposing to develop and utilize beneficial microorganisms referred to as biofungicides as a form of disease control in CEA facilities. Disease pressure is a persistent problem being faced by anyone entering the CEA realm and will continue to be a concern as companies attempt to increase their efficiencies by reducing inputs and increasing yields beyond the normal thresholds attainable in field production.