STATE OF NEW YORK

4911

2023-2024 Regular Sessions

IN ASSEMBLY

February 24, 2023

Introduced by M. of A. KELLES -- read once and referred to the Committee on Agriculture

AN ACT to amend the agriculture and markets law, in relation to establishing the agrivoltaics research program

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The agriculture and markets law is amended by adding a new section 151-j to read as follows:

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§ 151-j. Agrivoltaics research program. 1. There is hereby established 4 the agrivoltaics research program. The purpose of the program is to develop innovative science-based solutions to facilitate the co-location of crops and photovoltaics while promoting the biodiversity of endemic flora and fauna. In developing the program, the New York state college of agriculture and life sciences, as named pursuant to section fiftyseven hundred twelve of the education law, shall conduct, support, and develop technologies and management strategies, along with verifications 10 systems to facilitate the sustainable and resilient co-location of crops 11 12 and photovoltaics.

2. Subject to available appropriations, the program shall consider, 14 but not be limited to, the following: crop varietals and/or livestock 15 suitable for agrivoltaics; siting design considerations and array installation techniques compatible with agricultural co-location and/or biodiversity conservation; and integration of digital and robotic tech-17 nologies. The program shall also concomitantly consider socio-economics in the formation of research trials and published recommendations. The 20 program shall conduct and demonstrate successful cropping and/or livestock systems and technologies in pilot locations throughout the state 22 of New York and is hereby authorized to conduct such research on the state's agricultural experiment stations, and other locations deemed suitable for private and public sector partnerships to evaluate, deter-2.5 mine, and recommend strategies to enable agrivoltaics. The Cornell

EXPLANATION--Matter in italics (underscored) is new; matter in brackets [-] is old law to be omitted.

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- 1 <u>Cooperative Extension system shall be utilized for knowledge transfer,</u>
 2 <u>and annual reports shall be made and publicly disseminated.</u>
 - 3. The program shall include, but not be limited to, research on the following topics, consistent with New York state's climate goals:
 - (a) methods to maximize the economic efficiency and scientific efficacy of the co-location of agricultural crops and photovoltaics;
 - (b) improvements or enhancements in biodiversity when combined with low-lying or elevated photovoltaic installments;
- 9 (c) development, testing and deployment of technologies, including 10 digital agriculture systems, small-scale robotics for planting, harvest-11 ing, and crop management;
- (d) research that facilitates productive agrivoltaics across several
 different varieties of crops including research that enables understanding of agrivoltaics effects on soil health, soil carbon sequestration,
 erosion, water management, and specialty crop canopy management for
 enhanced climate resiliency; and
- 17 <u>(e) research that quantifies total kilowatts produced, rates of crop</u>
 18 <u>production, and greenhouse gas emissions avoided in lieu of fossil fuel</u>
 19 <u>generation.</u>
- 20 § 2. This act shall take effect immediately.