Cornell Cooperative Extension
Cornell Vegetable Program

**Cornell Vegetable Program**
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To the Northeast Experimental Stations Board of Directors:

I am writing in support of the Multistate proposal NE_TEMP1838: Development of a Weed Emergence Model for the Northeastern United States. I am a vegetable crops specialist and team leader for the CCE-Cornell Vegetable Program, a regional agricultural team that serves commercial vegetable, dry bean and potato producers in a 13-county area of western, New York. My focus is on processing vegetables and dry beans. I also work with farms that produce table beets on a large scale for the new Love Beets, USA facility in Rochester, NY. Each year, I organize advisory meetings for the different crops. Weed management is almost always at the top of the list of research priorities from the growers http://www.northeastipm.org/grant-programs/stakeholder-priorities/.

Real-time decision support tools for weed management have not been developed for the Northeast, despite the existence of a range of similar tools for insect pests and crop pathogens. The ability to predict percent emergence of major agricultural weeds in the Northeast would minimize repeat management actions for weed control, reducing farmer costs and off-target impacts such as herbicide runoff or incidental crop damage. Such tools exist for the Midwest, Italy's Veneto region, and other areas, but the Northeast is behind in this regard. The Network for Environment and Weather Applications (newa.cornell.edu) provides an appropriate existing platform for such a decision tool, where an existing suite of similar tools are already housed.

This tool would help the growers that I serve predict the emergence of particular weed species and better time their weed management efforts. For example, in processing green peas there is a zero tolerance for nightshade weeds because the immature nightshade berries are the same size and shape as the peas and cannot easily be separated from the green peas at the plant. Nightshades are considered toxic to humans. In many years, early planted processing peas are not at risk of nightshades, because the weeds emerge later than the peas and do not produce berries before pea harvest. However, in a year with exceptionally warm spring weather, growers will have to manage nightshade more aggressively. The emergence tool would be very helpful in decision making.

If I can provide additional information, please feel free to contact me at jrk2@cornell.edu or 585-394-3977 ext. 404.

Sincerely,

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