A strategic prioritization process to guide regional and statewide agronomic row crop extension research and programming

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Rationale:

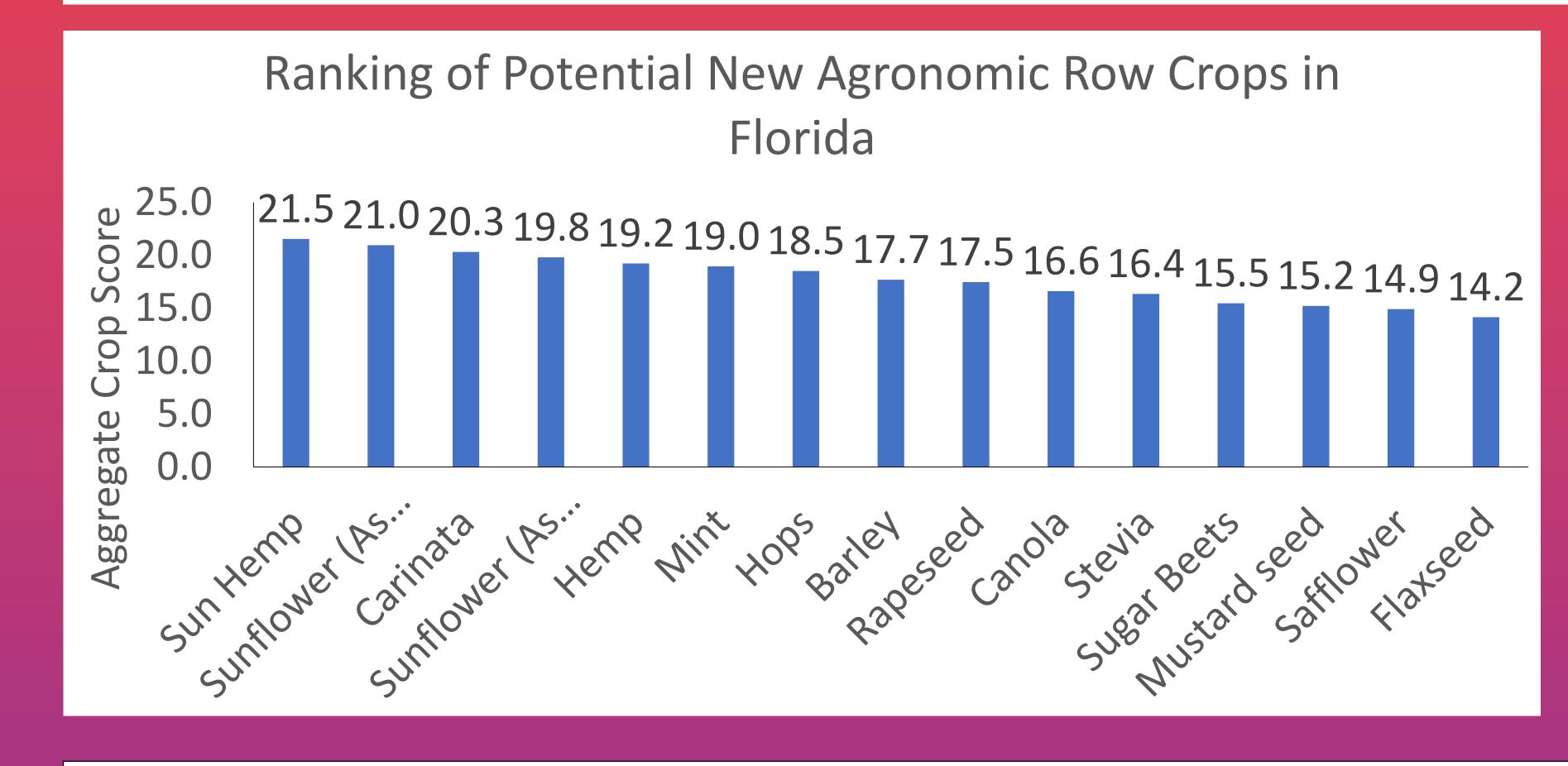
- Florida boast one of the most diverse agricultural industries in the United State.
- Producers are always in search of new crops to diversify their operations and open new markets.
- Agronomic row crops have suffered over the last few decades with lower commodity prices and commodity surpluses causing producers to look to other crops for more stable revenue streams. Applied research and extension programming often guides and assists producers with new crops and emerging markets to be successful. Objective:

Results:

- Our initial solicitation resulted in an exhaustive list of 15 potential new agronomic row crops.
- We received 10 anonymous responses to the survey ranking each of the 15 crops.
- Hemp and Sunflower (as a trap crop) were the highest ranked crops with potential emerging markets in Florida. Research Prioritization of all potential crops found cultivars and market viability were the two most important focal areas.
- Use and objective quantitative approach to identifying priorities for research and extension activities in to emerging agronomic row crops and their markets.

Study area:

- We focused on soliciting input on research and extension priorities from extension staff across the state of Florida.
- These extension personnel included state and regional specialist in agronomic row crops
- County extension agents were also solicited for input and a majority of



these agents came from counties with significant acreage in agronomic row crops.

Methods:

- We began soliciting input from agronomic row crop specialist and county agents by asking them to create individual lists of emerging crops they believe could be a profitable emerging alternative in their respective areas.
- After compiling an extensive list of potential emerging crops we asked extension personnel to anonymously complete a 10-question survey about each of these crops.
- The survey questions rated crops on components such as:
- Ability to grow in Florida
- Amount of existing research
- Extent of infrastructure for growing, harvesting, and processing
- Market viability

	Cultivars	Invasion Ecology	Methods	and Equipmen	Processin g Methods	Market viability	Other
Hemp	9	5	9	9	8	9	0
Hops	6	1	6	5	4	5	0
Barley	9	2	6	5	7	9	1
Sugar Beets	6	2	6	5	5	6	0
Mint	6	4	6	5	5	6	0
Carinata	7	1	4	4	4	6	1
Sun Hemp	6	2	. 5	5	5	7	0
Stevia	4	1	. 5	4	4	6	0
Sunflower (As a trap							
crop)	7	C	2	2	3	5	1
Sunflower (As an							
oilseed crop)	6	C	3	3	4	7	2
Canola	7	3	6	5	6	7	2
Flaxseed	6	3	6	5	5	6	1
Mustard seed	6	3	6	5	5	6	1
Rapeseed	7	3	6	5	5	7	2
Safflower	7	3	6	5	5	7	2

Each potential crop was rated based on these criteria based on how

much of a barrier each one was to the crop being successful in Florida.

- We calculated an aggregate score for each crop.
- Higher scores mean the crop was more likely to be a successful new agronomic row crop in Florida.
- We also asked agents and specialist to identify areas they felt needed research for each crop.

Conclusions

- This is an example of an objective way to priorities research and extension focal areas on large spatial scales (i.e. regionally or statewide). This method allow open and honest feedback for all involved and facilitates more efficient group decisions.
- This can be a valuable tool in the covid-19 era of virtual planning.