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Crop Protection Apps

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FOOD, AGRICULTURAL AND
BIOLOGICAL ENGINEERING

BACKGROUND

- Wide availability of smartphones, iPads, tablets, etc.
- Apps can support crop protection by providing the ability to communicate information, assist with field scouting, collect and access data, and more.
- More apps are becoming available on regular basis, so list is not comprehensive.
- Many apps are freely available.

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71 different crop protection apps were identified and categorized.

	<u>Type of Tool</u>	<u>Number of Apps Identified</u>
1	Weed, Disease, and Pest ID	7
2	Crop Protection Information	2
3	Tank Mix and Equipment Setup	7
4	Nozzle Selection	6
5	Scouting	23
6	Field Data Management	5
7	Weather	5
8	Other Apps	16

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WEED, DISEASE, PEST ID

Common Features:

- Identify and diagnose severity of weed, disease or pest presence.
- Save common pests for your area.
- Integrated pest management (IPM) strategies.



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CROP PROTECTION INFORMATION

Common Features:

- Browse data bases of herbicides, pesticides, and fungicides.
- View and read about active ingredients, labels, and safety information.
- Read the latest news related to crop protection.



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TANK MIX AND EQUIPMENT SETUP

Common Features:

- Generate tank mixes based on product and spray characteristics.
- Use data base of chemicals or input your own.
- Maintain field and spray logs for compliance.



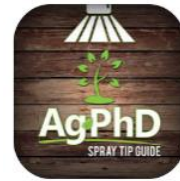
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NOZZLE SELECTION

Common Features:

- View listing of suggested tips for a specific spray operation.
- Calculate drop size, working speed, flow rate, etc.
- Sprayer calibration assistance.



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SCOUTING

Common Features:

- Collect and geotag images during scouting.
- Share field observations with consultants.
- Measure the advancement or suppression of problems.



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FIELD DATA MANAGEMENT

Common Features:

- Visualize field data.
- Develop replicated trials for on-farm research.
- Access historical data.



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WEATHER

Common Features:

- View local and national forecasts.
- Get weather alerts.
- Interactive radar and satellite maps.



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OTHER APPS

Common Features:

- Calculate field area.
- Access information on markets, weather, news and agronomic advice.
- Record keeping.



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SUMMARY

- Currently available apps cover a wide range of crop protection applications.
- Few apps provide a true “one-stop-shop”, so be prepared to use several.
- The ability to communicate information, assist with field scouting, and collect and access data can be helpful for making in-season decisions.

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RESOURCES

- Crop Protection Apps Fact Sheet:

go.osu.edu/CropProtectionApps

- Crop Nutrition Apps Fact Sheet:

go.osu.edu/CropNutritionApps

- USB Tech Toolshed:

unitedsoybean.org/techtoolshed

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Questions?

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