

POPULAR CROP SCOUTING RESOURCES

ISU Extension Store: To find ISU Extension publications listed below, go to the ISU Extension Store and use the search tool in the upper right hand corner of the page. <https://store.extension.iastate.edu/>

- Weed ID The best book version is *Weeds of the Great Plains*. from Nebraska Department of Ag, P.O. Box 94668, Lincoln, NE., \$25, order form www.nda.nebraska.gov/forms/nw11.pdf
 Currently offered at 50% off (\$12.50) as a new version will soon become available.
The best pocket guide is from ISU Extension, IPM 3, *Weed ID Field Guide*, \$10
Various weed ID Apps are available, FYI, Integrated Weed Management.org.
<https://integratedweedmanagement.org/index.php/iwm-toolbox/weed-identification/>
- Crop Diseases The very best is from APS Press: <https://my.apsnet.org/APSStore/>
 A Farmers Guide to Corn Diseases, \$30
 A Farmers Guide to Soybean Diseases, \$30
Excellent ISU Extension publications on crop diseases:
 IPM 5, *Corn Diseases*, \$5
 IPM 4, *Soybean Diseases*, \$5
 CSI 12, *Soybean Cyst Nematode Field Guide*, \$5
- Crop Insects CSI 14, *Field Crop Insects*, \$5
Speed Scouting Card for soybean aphid; download from the following link:
https://www.ent.iastate.edu/soybeanresearch/files/page/files/2009_speed_scouting_blank_form.pdf
Plot degree days at: <http://mesonet.agron.iastate.edu/plotting/auto/?q=108>
Economic threshold calculators for Black cutworm, European corn borer & Bean leaf Beetle
<https://www.ipm.iastate.edu/field-crop-insects>
- Disorders IPM 78, *Hail on Corn in Iowa*, Free pdf.
 IPM 79, *Hail on Soybean in Iowa*, Free pdf.
 RMA Loss Adjustment Standards Handbooks <https://www.rma.usda.gov/handbooks/25000/>
 For yield loss assessments for corn, soybeans, other crops. *i.e. hail or other factors.*
 IPM 42, *Nutrient Deficiencies and Application Injuries in Field Crops*, \$2 or free pdf.
- Crop Stage PMR 1009, *Corn Growth and Development*; booklet details crop stages, \$14.
 PM 1945, *Soybean Growth and Development*; booklet details crop stages, \$8.
 IPM 1, *Corn and Soybean Field Guide*; full color pocket guide on crop stage,
 production tips, and information on diseases, insects and other disorders, \$15.
- Forages *Alfalfa Management Guide*; free pdf download, 68-pages.
<https://www.agronomy.org/files/publications/alfalfa-management-guide.pdf>
Alfalfa Germination & Growth: https://www.alfalfa.org/pdf/Alf_GerminationGrowth.pdf
Alfalfa Winter Injury Assessment and Management (University of Minnesota)
<https://extension.umn.edu/growing-forages/alfalfa-winter-injury-assessment-and-management>
Forage ID: Purdue Univ. <https://www.agry.purdue.edu/ext/forages/ForageID/forageid.htm>
 Univ. of Minnesota <https://extension.umn.edu/forages/forage-variety-selection>
- Weather, Climate, Growing Degree Days, Soil Temperatures, etc.
Iowa Environmental Mesonet: <http://mesonet.agron.iastate.edu/agweather/>
Plot degree days at: <http://mesonet.agron.iastate.edu/plotting/auto/?q=108>
Plot 4" soil temps: <https://mesonet.agron.iastate.edu/agclimate/smts.php>
Tremendous amount of other weather data available at this site.
Iowa Food Information System (soil temps): <http://ifis.iowafloodcenter.org/ifis/en/>

BASIC CROP SCOUT EQUIPMENT CHECKLIST

<u>Item</u>	<u>Purpose</u>
Trowel or knife	Dig new seedlings and scout for insects below ground.
Spade	Dig larger corn, soybean and forage plants.
Pocket knife	
Clipboard, iPad	Note taking.
Photography	Take photos of problems for ID or evidence... digital camera, iPad, smartphone. Clip-on microscope magnifiers for cell phones available (\$5 to \$50).
Smartphone, iPad	Optional, can access Apps of various scouting resources.
Field maps	For scouting notes; paper copy or digital.
Soil probe	For soil sampling, nematode sampling, LSNT sampling. One example is KHS Soil Probe, M&M Supply Co, Clear Lake, IA: https://soilprobe.us/
Soil sample bags	Usually available free on request from which ever soil testing lab you care to use.
Soil thermometer	Determine time for spring planting and fall anhydrous application. For example: Google: Taylor 5989N (1-inch dial) for ~\$4 to \$10. Or with a 2-inch dial is made by Taylor 5976-35 for ~\$9 to \$15.
Pocket wind-speed meter	Optional but helpful if coordinating pesticide applications (\$15 to \$100).
Hand lens	View insect, disease, and weed ID characteristics; 10x to 20x lens works well, but need a minimum 30x lens for soybean rust ID. <i>i.e.</i> Stalwart 30x lens Model # M550010 (21 mm size), \$8 to \$15 from various vendors.
Insect vials/containers	Store insects for later ID; nearly any small container works well.
Sweep net	15-inch diameter net to scout for Potato leafhopper, Bean leaf beetle, or survey for other insects (alfalfa weevil, caterpillars). For example: http://bioquip.com 7625HS, Heavy duty sweep net, 2-ft. handle, 15" dia. Bag, \$31.50 7635HS, Heavy duty sweep net, 3-ft. handle, 15" dia. Bag, \$35.58
Tape measure	For plant population estimates and residue counts; 25 ft. works well.
Square foot measure	For alfalfa plant counts and stem-counts; easy to make your own.
Marker flags or stakes	or GPS receiver; mark sites for measurements and return visits.
ISU submission forms	For disease, insect, or weed samples for ID. Instructions for ISU Plant and Insect Diagnostic Clinic are at: http://hortnews.extension.iastate.edu/pidc Include tips on how to take good photos for ID via email to extension staff. Packaging materials include: <ul style="list-style-type: none">• newspaper or paper towel to wrap plant samples• aluminum foil to wrap soil with roots for seedling whole plant samples• trash bags to line packing boxes to send plant samples• boxes and packing tape to mail materials• permanent marker to label materials

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