

## Home Page

ILLINOIS COLLEGE OF ACES ACES A-Z Search ACES GO

## Extension & Outreach

### Department of Crop Sciences

**FIELD CROPS**

**FRUIT & VEGETABLE**

**TURFGRASS**

**ORNAMENTALS**

**BIOFUEL CROPS**

**AFFILIATED SITES:**

- IPM
- Plant Clinic
- PSEP
- Master Gardeners
- Variety Testing
- Corn & Soybean Classic

**NEW:** View the 2014 Corn and Soybean Classics Proceedings. The Illinois Agronomy Handbook is now available for viewing on-line. View the Proceedings of the 2013 AgMasters Conference (Adobe PDF, 5.1MB)

**In the News**

October 19: Regional Reports (from Illinois Fruit and Vegetable News)

**Latest Newsletters**

- The Bulletin**  
Pest management and crop development information for Illinois
- Fruit & Vegetable News**  
A newsletter for commercial growers of fruit and vegetable crops

## Logo



## URL

<http://extension.cropsciences.illinois.edu/>  
<http://extension.cropsciences.illinois.edu/handbook/>

## Subject

Agriculture-Handbooks, manuals, etc.;  
 Agronomy- Handbooks, manuals, etc.

## Accessibility

Free

## Language

English

## Publisher

University of Illinois at Urbana-Champaign

## ***Brief History***

The University of Illinois is recognized worldwide as one of the great public universities, and the College of Agricultural, Consumer and Environmental Sciences (ACES) has been there from day one. ACES include what they discover through cutting-edge research to ensure nutritious and safe food, sustainable and innovative agriculture, strong families and communities, and environmentally sound use of natural resources. The University of Illinois (originally Illinois Industrial University) opened for business in March 1868, with agriculture as one of the first programs of study. Since those first days, the College of ACES has grown steadily in its national and international presence, continually adapting to meet new challenges and opportunities in the core domains. Their robust array of disciplines in agricultural, consumer, and environmental sciences forms a strong foundation for the leadership, as they educate each new generation and tackle the world's complex issues. For this novel purpose they have introduced this online hand book which gives information on those subjects freely.

( <http://aces.illinois.edu/about/history>)

## ***Scope and Coverage***

The hand book includes 15 chapters which covers the topics like:

- Weather and Crops;
- Corn;
- Soybean;
- Small Grains and Grain Sorghum;
- Cropping System;
- Hay and Pasture;
- Water Quality;
- Managing Soil pH and Crop Nutrients;
- Managing Nitrogen;
- Soil Management and Tillage;
- Water Management;
- Weed Management;
- Managing Insect Pests;
- Managing Diseases;
- Nematodes.

The home page of the hand book (the following screen shot) provides special information on following topics which includes further sub topics.



FIELD CROPS    FRUIT & VEGETABLE    TURFGRASS    ORNAMENTALS    BIOFUELS

- The Field Crops has following sub topics:

FIELD CROPS	FRUIT & VEGETABLE	TURFGRASS	ORNAMENTALS	BIOFUELS
<b>Information by Category</b>		<b>Information by Commodity</b>		
<b>Diseases</b>		Alfalfa		
<b>Insects</b>		Corn		
<b>Production</b>		Sorghum		
<b>Weeds</b>		Soybeans		
		Wheat		

➤ Fruit & vegetable includes the following sub topics:

FIELD CROPS	FRUIT & VEGETABLE	TURFGRASS	ORNAMENTALS	BIOFUELS
<b>Information by Category</b>		<b>Information by Commodity</b>		
<b>Diseases</b>		Asparagus   Bean and Pea   Beet, Carrot and Parsnip		
<b>Insects</b>		Cole Crops   Cucurbit Crops   Lettuce, Spinach and Other Greens		
<b>Production</b>		Onions, Garlic and Leeks   Potatoes   Sweet Corn		
<b>Weeds</b>		Sweet Potatoes   Tomatoes, Peppers and Eggplant		
		Apples and Pears   Brambles   Grapes   Strawberries		

➤ The Turfgrass and Ornamentals includes the following sub topics:

FIELD CROPS	FRUIT & VEGETABLE	TURFGRASS	ORNAMENTALS	BIOFUELS
<b>Information for Homeowners</b>				
<b>Diseases</b>				
<b>Insects</b>				
<b>Production</b>				
<b>Weeds</b>				

➤ The Biofuels have following sub topics:

FIELD CROPS	FRUITS & VEGETABLES	TURFGRASS	ORNAMENTALS	BIOFUELS
<b>Biofuels</b>		Info		
		Diseases		
		Insects		
		Production		
		Weeds		

### ***Kind of Information***

The hand book gives huge amount of information on the given domain. The following two articles are chosen from the collection to represent the coverage of topics by these articles.

#### **Example one:**

The topic named “ Weather and Crops” coming from chapter one, gives following information about necessary environment for the cultivation of crops:

- ✓ Crop Response to Weather Variables;
  - Temperature
  - Precipitation
- ✓ Potential Evapotranspiration
  - Soil Moisture
  - Solar Radiation
- ✓ Weather and Climate Forecasts and Accuracies
  - Influence of El Niño and La Niña on Illinois Climate

#### **Example two:**

**The** chapter three of the hand book includes the article on Soybean. The article has following points:

- ✓ Soybean Plant Development
- ✓ Variety Selection
- ✓ Planting Date
- ✓ Planting Rate and Seed Issues
  - Seed Quality and Testing
  - Seed Size
- ✓ Inoculation
- ✓ Planting Depth
- ✓ Row Width
- ✓ Double-Cropping Considerations
- ✓ Replanting Soybean
- ✓ Specialty Types of Soybeans
- ✓ High-Yield Soybeans

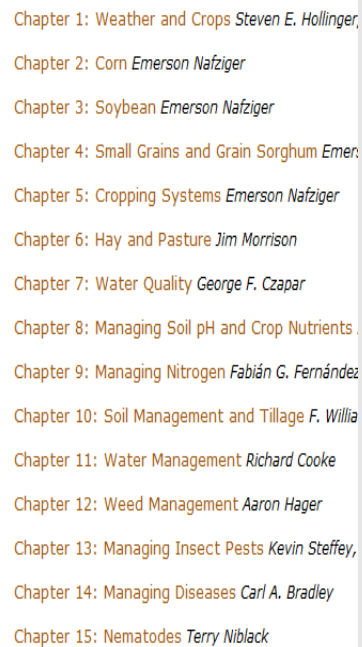
The above two articles and the others also include numbers of figures, charts and tables related to the topic.

### ***Special Features***

- The hand book provides articles in pdf format and all the entries have continuous pagination from chapter 1 to chapter 15;
- It also have relative index which connects the key words with their page numbers;
- The above features make possible to the users to download all pdfs including index for using it as printed document;

### ***Arrangement Pattern***

The topics in this hand book are arranged under 15 chapters. The following screen shot shows the arrangement.



Chapter 1: Weather and Crops *Steven E. Hollinger*  
Chapter 2: Corn *Emerson Nafziger*  
Chapter 3: Soybean *Emerson Nafziger*  
Chapter 4: Small Grains and Grain Sorghum *Emerson Nafziger*  
Chapter 5: Cropping Systems *Emerson Nafziger*  
Chapter 6: Hay and Pasture *Jim Morrison*  
Chapter 7: Water Quality *George F. Czapar*  
Chapter 8: Managing Soil pH and Crop Nutrients *Emerson Nafziger*  
Chapter 9: Managing Nitrogen *Fabián G. Fernández*  
Chapter 10: Soil Management and Tillage *F. Williams*  
Chapter 11: Water Management *Richard Cooke*  
Chapter 12: Weed Management *Aaron Hager*  
Chapter 13: Managing Insect Pests *Kevin Steffey*  
Chapter 14: Managing Diseases *Carl A. Bradley*  
Chapter 15: Nematodes *Terry Niblack*

### ***Remarks***

This hand book is a very much helpful tool for the subject agriculture and it makes a compendium of miscellaneous information on that subject. It hopes the betterment of the lives of people, not only in Illinois but around the world.

### ***Comparable Tools***

- Handbook on the Globalisation of Agriculture  
( <http://www.elgaronline.com/view/9780857939821.xml>)
- Handbook of Agricultural Entomology  
( <http://onlinelibrary.wiley.com/book/10.1002/9781118469347>)
- Hand Book of Agriculture  
(<http://www.icar.org.in/en/node/871>)

### ***Date of Access***

November 11, 2016