

**ALFALFA**

## Diseases

- Identification ..... 159-164
- Time of occurrence..... 158
- Submitting plant samples to lab. .... 198

## Fertility

- Nutrient deficiency symptoms ..... 171-172
- Nutrient sufficiency ranges ..... 174
- Phosphate recommendations ..... 174
- Potash recommendations ..... 173

## Harvesting ..... 167-170

## Insects

- Identification ..... 154-157
- Scouting calendar ..... 153
- Submitting insect samples to lab..... 197

## Miscellaneous

- Stand ..... 165

## Reseeding ..... 166

**CORN**

## Diseases

- Estimate leaf damage ..... 31
- Identification ..... 32-48
- Time of occurrence..... 30
- Submitting plant samples to lab ..... 198
- Submitting grain for mycotoxins ..... 202

## Ear Abnormalities ..... 49-51

## Fertility

- Estimating nitrogen loss ..... 60-61
- Nitrogen recommendations ..... 59
- Nutrient deficiency symptoms ..... 52-58
- Nutrient sufficiency ranges ..... 66
- Phosphate recommendations ..... 65
- Potash recommendations ..... 63-64

**CORN (cont.)**

Growth Staging..... 2-5

**Insects**

Identification ..... 10-23

Instar guide .....inside back cover

Scouting calendar ..... 8

Submitting insect samples to lab..... 197

**Miscellaneous**

Eff. of planting date on grain yields ..... 70

Estimating pre-harvest yields ..... 73

Sampling insects & plants ..... 197, 198

Seed spacing for plant populations ..... 74

**Replant Decisions**

Examples of corn leaf damage..... 31

Determining corn growth stages ..... 2-5

Information required for replant..... 67-69

Yield loss due to defoliation..... 7

**Weeds**

Herbicide injury diagnosis ..... 25-29

Weed threshold ..... 24

**SAMPLING**

Soil Sampling for nutrient analysis ..... 203

Sampling grain for mycotoxins ..... 202

Submitting insect samples to lab ..... 197

Submitting plant samples to lab ..... 198

**WEEDS****Identification**

Grass key ..... 176-177

Annual grass weeds..... 178-180

Perennial grass weeds..... 181

Summer annual broadleaf..... 182-188

**WEEDS (cont.)**

## Identification (cont)

Winter annual broadleaf.....	189-191
Biennial broadleaf.....	192
Perennial broadleaf.....	193-195

## Threshold

Corn.....	24
Soybean.....	88

**PESTICIDE APPLICATION TECHNOLOGY**

Calibration equations for liquid applications.....	219-220
Calibrating granular applicators.....	218
Even flat-fan band widths.....	216
Nozzle heights for spray pattern.....	216
Nozzle types for various uses.....	215
Head scab application technology.....	217

**GENERAL MANAGEMENT**

## Fertility

Lime recommendations.....	227
Micronutrient deficiencies.....	229

## Nutrient deficiency symptoms

Alfalfa.....	171-172
Corn.....	52-58
Soybeans.....	114-117
Wheat.....	147-148

## Nutrient removal by crop..... 224

## Nutrient sufficiency ranges

Alfalfa.....	174
Corn.....	66
Soybeans.....	119
Wheat.....	151

## GENERAL MANAGEMENT (cont.)

Nutrients in manure	
Solid .....	233
Liquid.....	234
Phosphate recommendations	
Alfalfa .....	174
Corn .....	65
Soybeans .....	119
Wheat.....	151
Potash recommendations	
Alfalfa .....	173
Corn .....	63-64
Soybeans .....	118
Wheat.....	150
Soil pH for crops .....	226
Soil test critical levels .....	228
Submitting plant samples to lab .....	198
Insects, Mites	
Identification	
Alfalfa .....	154-157
Corn .....	10-23
Soybeans.....	81-87
Wheat .....	126-130
Submitting insect samples to lab.....	197
Temperature developmental units .....	222-223
Miscellaneous	
Area & volume calculations.....	236
County educators .....	241-242
Extension specialists & phone numbers ...	240
Length of row equal to 1/1000 ac.....	232
POISON CONTROL TEL. NUMBERS.....	244
Web site addresses.....	243

## SOYBEAN

## Diseases

Identification .....	93-113
Time of occurrence.....	92
Submitting plant samples to lab .....	198

## Fertility

Nutrient deficiency symptoms .....	114-117
Nutrient sufficiency ranges .....	119
Phosphate recommendations .....	119
Potash recommendations .....	118

## Growth Stage Definitions

Vegetative & Reproductive .....	76-77
---------------------------------	-------

## Insects, Mites

Estimating leaf damage.....	80
Identification .....	81-87
Pest Assessment.....	79
Scouting calendar .....	78
Submitting insect samples to lab.....	197

## Miscellaneous

Sampling Insects & Plants .....	197-201
---------------------------------	---------

## Replant decisions

Information needed .....	120-123
Estimating leaf damage.....	80
Plant population for row widths .....	120
Yield loss from defoliation .....	122
Replant worksheet .....	123

## Weeds

Herbicide injury diagnosis .....	89-91
Weed threshold .....	88

## WHEAT

## Diseases

Est. % leaf area damaged .....	132-133
Identification .....	134-145
Submitting plant samples to lab .....	198
Thresholds for fungicide app.....	146
Time of occurrence.....	131

Head scab application technology.....	217
---------------------------------------	-----

Sampling grain for mycotoxins .....	202
-------------------------------------	-----

## Fertility

Nitrogen recommendation.....	149
Nutrient deficiency symptoms .....	147-148
Nutrient sufficiency ranges.....	151
Phosphate recommendations .....	151
Potash recommendations .....	150

## Growth Stages

The Feekes Scale .....	124
------------------------	-----

## Insects

Identification .....	126-130
Scouting calendar .....	125
Submitting insect samples to lab.....	197