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## CROPS

Crops youth apprentices learn the skills needed to produce quality crops including planting crops, monitoring crop health, harvesting crops, and performing post-harvest handling and recordkeeping.

**Length of Apprenticeship:** One year. Youth apprentices must have completed Plant Fundamentals prior to beginning this youth apprenticeship.

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## COMPETENCIES

Youth apprentices must complete a **total of 11** competencies. **Ten** must be from the list below. If necessary, employers can substitute **1** competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment. *Note: The successful completion of Plant Fundamentals is required prior to starting this pathway.*

Competencies
1. Assist to plan crop rotation schedule
2. Perform tillage
3. Plant crops
4. Monitor crops
5. Manage weeds, pests, and diseases
6. Harvest crop product
7. Transport crop
8. Perform post-harvest handling and recordkeeping
9. Operate crop equipment and machinery
10. Service equipment and machinery
11. Examine facility and business marketing plan

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## REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES

The following Registered Apprenticeship is available in this area:

- Organic Vegetable Farm Manager

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## POST-SECONDARY PATHWAY OPPORTUNITIES

There are several post-secondary pathway opportunities in this area. The following is a partial list.

- Crop Scout
- Crop Science (Agronomy)



**YOUTH APPRENTICE INFORMATION**

<b>Youth Apprentice Name</b>	
<b>YA Coordinator</b>	<b>YA Consortium</b>
<b>School District</b>	<b>High School Graduation Date</b>

**REQUIREMENTS**

**Level One Requirements**

Youth apprentices must complete ALL the items listed below. Check completed areas.

- Competency checklist
- Employability Skills checklist (in this OJL Guide) or the DPI Employability Skills Certificate
- Related instruction equal to 1 high school credit or at least 3 college credits
- Minimum of 450 work hours

**HOURS**

Record the hours the youth apprentice worked.

<b>Total Hours Employed</b>	<b>Company Name</b>	<b>Telephone Number</b>

## SIGNATURES

The On-the-Job Learning Performance Standards Guide includes a list of competencies youth apprentices learn through mentoring and training at the worksite.

Instructions for the Worksite Employers/Mentors and School-Based or YA coordinators.

This document should be reviewed with the employer / mentor, school-based or YA coordinator on a regular basis with the youth apprentice to record progress and plan future steps to ensure completion of the required competencies. Mentors, school-based / YA coordinator, and the apprentice sign below.

Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed
School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed
Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

## COMPETENCIES

Youth apprentices must complete a **total of 11** competencies. **Ten** must be from the list below. If necessary, employers can substitute **1** competency with another occupationally appropriate skill. That skill should be added to the competency list for assessment. *Note: The successful completion of Plant Fundamentals is required prior to starting this pathway.*

### Rating Scale

3: Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2: Meets entry level criteria | Requires some supervision | Often displays this behavior

1: Needs improvement | Requires much assistance and supervision | Rarely displays this behavior

Competency and Rating Criteria	Minimum Rating of 2 for EACH Check Rating		
	1	2	3
<b>1. Assist to plan crop rotation schedule</b> <ul style="list-style-type: none"> <li>• review crop history</li> <li>• review field needs and conditions</li> <li>• identify companion planting options</li> <li>• review seed hybrid and variety selections</li> <li>• review harvest logistics</li> <li>• plan ways to group crops</li> <li>• schedule succession planting of cash crops</li> <li>• determine cover crops</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Perform tillage</b> <ul style="list-style-type: none"> <li>• verify soil moisture is adequate for tillage</li> <li>• select and setup tillage instrument</li> <li>• monitor depth and angle</li> <li>• clean equipment</li> <li>• verify desired effect was achieved</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Plant crops</b> <ul style="list-style-type: none"> <li>• don personal protective equipment (PPE)</li> <li>• work with employer to assess the fields readiness for planting</li> <li>• verify planting depth and number of seeds per acre</li> <li>• complete seeding, planting seedlings, or root balls</li> <li>• record planting results</li> <li>• clean equipment</li> <li>• cover unused soil</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Competency and Rating Criteria	Minimum Rating of 2 for EACH Check Rating		
	1	2	3
<b>4. Monitor crops</b> <ul style="list-style-type: none"> <li>• observe crop growth and field conditions</li> <li>• scout for weeds, insects, and plant diseases</li> <li>• plot areas with known problems on map</li> <li>• analyze data collected</li> <li>• recommend actions to be taken</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5. Manage weeds, pests, and diseases</b> <ul style="list-style-type: none"> <li>• identify plant pests</li> <li>• implement pest control plan</li> <li>• perform non-mechanical weeding</li> <li>• perform mechanical weeding</li> <li>• perform mulching</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6. Harvest crop product</b> <ul style="list-style-type: none"> <li>• don personal protective equipment (PPE)</li> <li>• harvest only mature product</li> <li>• follow farm harvest procedures</li> <li>• handle product carefully to prevent damage</li> <li>• document harvest map</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7. Transport crop</b> <ul style="list-style-type: none"> <li>• determine load capacity and license of transport vehicle</li> <li>• load and unload crop</li> <li>• secure load</li> <li>• protect crop from sun, wind, high temps, and mechanical damage</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>8. Perform post-harvest handling and recordkeeping</b> <ul style="list-style-type: none"> <li>• inspect crop</li> <li>• sort crop according to standards</li> <li>• remove damaged and diseased product</li> <li>• process and grade product</li> <li>• store product as required for humidity and temperature</li> <li>• dry crops if needed for storage</li> <li>• store product in appropriate containers</li> <li>• record harvest results</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Competency and Rating Criteria	Minimum Rating of 2 for EACH Check Rating		
	1	2	3
<b>9. Operate crop equipment and machinery</b> <ul style="list-style-type: none"> <li>• don personal protective equipment (PPE)</li> <li>• verify tool/equipment is in good working order</li> <li>• calibrate tool/equipment</li> <li>• use guarding devices if applicable</li> <li>• follow standard procedures for clean-up and shutdown</li> <li>• report abnormal tool/equipment conditions</li> <li>• store tool/equipment appropriately</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>10. Service equipment and machinery</b> <ul style="list-style-type: none"> <li>• don personal protective equipment (PPE)</li> <li>• clean equipment and machinery</li> <li>• perform preventative maintenance</li> <li>• maintain fluid levels</li> <li>• calibrate metering, monitoring, and sensing equipment</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>11. Examine facility business and marketing plan</b> <ul style="list-style-type: none"> <li>• identify business goals and objectives</li> <li>• view how business records are kept and maintained</li> <li>• identify products for sale</li> <li>• review cost of production</li> <li>• review pricing</li> <li>• review markets for selling products</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Competency Substitute</b> (if you replaced a competency above, note the competency and rating)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>			

**RELATED INSTRUCTION**

Indicate which related instruction course(s) the youth apprentice completed:

Course Title	Credits	Location