<table>
<thead>
<tr>
<th>TABLES FOR GENERAL PRODUCTION RECOMMENDATIONS</th>
<th>1-32</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A. Vegetable Families</td>
<td>1</td>
</tr>
<tr>
<td>1. Soil Test Interpretations and Recommendations Based on Soil Test Results</td>
<td>3</td>
</tr>
<tr>
<td>2. Fertilizer Suggestions for Vegetable Crops</td>
<td>6</td>
</tr>
<tr>
<td>3. Nutrient Values for Manure Applications and Crop Residues</td>
<td>10</td>
</tr>
<tr>
<td>4. Percentage Equivalents and Conversion Factors for Major, Secondary, and Micronutrient Fertilizer Sources</td>
<td>10</td>
</tr>
<tr>
<td>5. Optimum and Minimum Temperatures for Transplant Production</td>
<td>14</td>
</tr>
<tr>
<td>6. Vegetable Seed Sizes</td>
<td>17</td>
</tr>
<tr>
<td>7. Population of Plants per Acre at Several Between-row and In-row Spacings</td>
<td>17</td>
</tr>
<tr>
<td>8. Critical Periods of Water Need for Vegetable Crops</td>
<td>17</td>
</tr>
<tr>
<td>9. Available Water-Holding Capacity Based on Soil Texture</td>
<td>17</td>
</tr>
<tr>
<td>10. Soil Infiltration Rates Based on Soil Texture</td>
<td>18</td>
</tr>
<tr>
<td>11. Hours Required to Apply 1&quot; of Water Based on Row Spacing</td>
<td>18</td>
</tr>
<tr>
<td>12. Maximum Application Rate in Minutes for Drip Irrigated Production</td>
<td>18</td>
</tr>
<tr>
<td>13. Predators and Parasites of Vegetable Pests</td>
<td>28</td>
</tr>
</tbody>
</table>

**GENERAL PRODUCTION RECOMMENDATIONS** | 1 |

- **Varieties** | 1 |
- **Crop Rotation** | 1 |
- **Soils and Soil Fertility** | 2 |
- **Nutrient Management and Maximizing Production** | 4 |
- **Minimum Tillage for Vegetable Production** | 10 |
- **Cover Crops** | 11 |
- **Transplant Production** | 13 |
- **Grafting in Vegetable Crops** | 15 |
- **Disease Control in Plant Beds** | 16 |
- **Seed Storage and Handling** | 16 |
- **Plant Populations** | 16 |
- **Irrigation** | 18 |
- **Mulches and Row Covers** | 21 |
- **Pollination** | 22 |
- **How to Improve Pest Control** | 23 |
- **Beneficial Insects** | 26 |
- **Diagnosing Vegetable Crop Problems** | 28 |
- **Air Pollution Injury** | 29 |
- **What are Good Agricultural Practices (GAPs)?** | 30 |
- **Basic Principles of Good Agricultural Practices (GAPs)** | 30 |
- **Postharvest Handling** | 30 |
- **Optimizing Commerical Cooling** | 31 |
- **Cooling Methods** | 33 |

**SPECIFIC COMMODITY RECOMMENDATIONS** | 35 |

- **Asparagus** | 35 |
- **Basil** | 37 |
- **Beans: Lima and Snap** | 38 |
- **Beets** | 41 |
- **Broccoli, Cabbage, Cauliflower, Collards, Kale, and Kohlrabi** | 42 |
- **Carrots** | 46 |
- **Cucumbers** | 49 |
- **Eggplant** | 52 |
- **Garlic and Elephant Garlic** | 54 |
- **Greens: Mustard, Turnip** | 56 |
- **Leeks** | 57 |
- **Lettuce, Endive, and Escarole** | 58 |
- **Melons** | 60 |
- **Okra** | 63 |
- **Onions and Green Onions** | 64 |
- **Parsley and Cilantro** | 66 |
- **Parsnip** | 68 |
- **Peas: English/Garden** | 69 |
- **Peas: Southern** | 70 |
- **Peppers** | 72 |
- **Potatoes, Irish** | 75 |
- **Pumpkins and Winter Squash** | 77 |
- **Radishes, Rutabagas, and Turnips** | 81 |
- **Spinach** | 83 |
- **Summer Squash** | 84 |
- **Sweet Corn** | 87 |
- **Sweetpotato** | 91 |
- **Tomatoes** | 93 |
- **Watermelon** | 98 |

**PEST MANAGEMENT** | 101 |

- **Calibrating Chemical Application Equipment. 104-109**
  - Calibrating a Sprayer | 104 |
  - Calibrating a Granular Applicator | 107 |
  - Calibrating a Broadcast Spreader | 108 |
  - Calibration Variables | 109 |

**REGISTERED FUNGICIDES, INSECTICIDES, AND MITICIDES FOR VEGETABLES** | 110 |

**RESISTANCE MANAGEMENT AND THE INSECTICIDE RESISTANCE ACTION COMMITTEE (IRAC) CODES FOR MODES OF ACTION OF INSECTICIDES** | 110 |

**BE SAFE WITH PESTICIDES** | 111-117 |

- **General Information** | 111 |
- **Respiratory Protective Devices for Pesticides** | 114 |
- **Protecting Our Groundwater** | 115 |
- **Toxicity of Chemicals Used in Pest Control** | 117 |

**INSECT, DISEASE, AND WEED CONTROL TABLES** | 119-269 |

**EMERGENCY NUMBERS BY STATE** | 270 |