

## 〈 Summary 〉

Purpose& Contents	<input type="checkbox"/> Research Purpose <ul style="list-style-type: none"> <li>○ To develop of suitable strategy to improve the productivity levels for cereal crops such as sorghum, foxtail &amp; proso millet and adzuki bean</li> <li>○ Establishment of optimum mechanical cultivation methods for cereal crops</li> </ul> <input type="checkbox"/> Research Contents <ul style="list-style-type: none"> <li>○ Analysis of farmer's cultivation methods and mechanization factors for cereal crops</li> <li>○ Evaluation of sowing and harvesting mechanization suitability by cultivation methods of cereal crops</li> <li>○ Establishment of optimum cultivation methods of cereal crops</li> </ul>
Results	<input type="checkbox"/> Analysis of farmer's cultivation methods for cereal crops <ul style="list-style-type: none"> <li>○ The survey of farmer's cultivation methods for cereal crops <ul style="list-style-type: none"> <li>- Sowing: manual 53%, mechanical 28%, broadcasting 18%, transplanting 22%</li> <li>- Harvesting: proso millet 57, sorghum 20, foxtail millet 27, adzuki bean 7%</li> </ul> </li> </ul> <input type="checkbox"/> Evaluation of suitability mechanical sowing cultivation methods <ul style="list-style-type: none"> <li>- Sorghum: transplanting, foxtail&amp;proso millet: broadcasting, adzuki bean: drilling</li> </ul> <input type="checkbox"/> Establishment of optimum cultivation methods of cereal crops <ul style="list-style-type: none"> <li>○ Establishment of optimum cultivation methods for foxtail millet <ul style="list-style-type: none"> <li>- Cultivars(Samdachal), sowing day(mid-June), sowing rate(1kg/10a)</li> </ul> </li> <li>○ Establishment of optimum cultivation methods for proso millet <ul style="list-style-type: none"> <li>- Cultivars(Leebackchal), sowing day(mid-June), sowing rate(1.5kg/10a)</li> </ul> </li> <li>○ Establishment of optimum cultivation methods for sorghum <ul style="list-style-type: none"> <li>- Sowing day(10-June), optimum row spacing(60x20cm)</li> </ul> </li> <li>○ Establishment of drill sowing cultivation methods for adzuki bean <ul style="list-style-type: none"> <li>- Cultivars(Ahrari), sowing day(5th-July), optimum row spacing(70cm)</li> </ul> </li> </ul> <input type="checkbox"/> Establishment of optimum cultivation methods of cereal crops <ul style="list-style-type: none"> <li>○ Sorghum: transplanting, foxtail&amp;proso millet: broadcasting, adzuki bean: drilling</li> </ul>
Expected Contribution	<input type="checkbox"/> Application plan <ul style="list-style-type: none"> <li>○ Disseminating labor saving cultivation technology of cereal crops connected with a new technology demonstration in farming field</li> </ul> <input type="checkbox"/> Expected Contribution <ul style="list-style-type: none"> <li>○ Improving farm productivity by establishing optimum cultivation methods <ul style="list-style-type: none"> <li>- Yield increase of famer: ('12) 135 → ('17) 180kg/10a</li> <li>- Improvement of mechanical rate: ('12) 12.1% → ('17) 30%</li> </ul> </li> </ul>
Keywords	<div>cereal crops</div> <div>mechanical cultivation</div> <div>cultivation methods</div> <div>standard cultivation</div> <div>On-Farm Evaluation</div>