

# INTSORMIL

## Annual Project Report Guidelines

Year 5, September 30, 2010 through September 29, 2011

All reports may be **SINGLE SPACED** and **NO LONGER THAN TEN (10) PAGES** (IN WORD OR WORD PERFECT FORMAT) **submitted by e-mail**.

Tables and/or graphs must be submitted as **.jpg, .bmp, or .tif file format**.

The annual report format should be as follows:

### Project Number, Title and Principal Investigator

### Collaborating Scientists

Name, title and **COMPLETE ADDRESS**. (Regional Program and U.S.). Collaborating Scientists must be intimately involved in the achievement of your project objective. Other "cooperating" scientists can be mentioned in the networking section.

### Introduction and Justification

This should be a brief **ONE PAGE OR LESS SUMMARY OF PROJECT ACTIVITY**. It should be written using non-specific terms as much as possible. Stress the **MAJOR ACHIEVEMENTS AS THEY RELATE TO WORKPLAN OBJECTIVES, AND OBJECTIVES, TARGETS, BENCHMARKS AND INDICATORS, AND THROUGHPUTS OF THE INTSORMIL STRATEGIC PLAN**. How will proposed activities contribute to achieving INTSORMIL goals. (Table 1)

### Objectives and Implementation Sites

Include relationship to INTSORMIL Objectives and Targets. (See Work Plan)

### Research Methodology and Strategy

Description for meeting objectives.  
Description of proposed interdisciplinary team.

### Research Results

Discussion of research results.  
Achievement of activities proposed in Work Plan.  
Relationship and contribution to INTSORMIL Strategic Plan objectives, targets, benchmarks and indicators as proposed in Work Plan.  
Reasons why goals not met.

### Training (Degree and Non-Degree)

Two separate pages are attached, one for DEGREE students and one for NON-DEGREE students. Fill in the requested information and return to the ME office with your annual report. **INCLUDE PARTICIPANTS PERMANENT HOME COUNTRY ADDRESS.**

### Networking Activities

Workshops and meetings.  
Research investigator exchanges  
Research information exchange.  
Germplasm conservation and distribution (if applicable).

### Publications and Presentations

Publications will be categorized as shown below. List only publications relating to INTSORMIL and published during this cooperative agreement. List alphabetically by surnames of the authors. Format is shown on the following page.

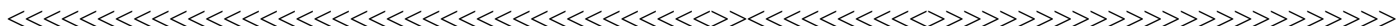
- Journal Articles
- Books, Book Chapters and Proceedings
- Dissertations and Theses
- Miscellaneous Publications
- Abstracts

**“Bullet” or Project Highlight**

(Example) “In 2007-2008 INTSORMIL project “X” developed and released “Technology, i.e., hybrid pest management practice, food product, etc., which will be/is used by most (%) growers in “X” country.” Emphasize the objective area, indicator, throughputs and milestones achieved.

**Executive Summary Information**

Contrast of activities planned for the reporting period and activities accomplished.  
Brief review of program and problems to date, and discussion of technical and managerial issues significant to the success or failure of this project.



**Publication Examples**

**Abstracts**

Barwale-Zehr, U. and J.D. Axtell. 1993. Genetic analysis of mutable phenotype associated with candy stripe sorghum. Agron. Abstr. p. 172. Amer. Soc. of Agron., Cincinnati, Ohio.

**Journal Articles** - Peer reviewed articles should be either published or accepted for publication, **not submitted for publication.**

Mengel, D.B. and S.A. Barber. 1974. Rate of nutrient uptake per unit of corn root under field conditions.

**Books, Book Chapters and Proceedings**

*Books*

Lindsay, W.L. 1979. Chemical Equilibria in Soils. Wiley-Interscience, New York, N.Y.

*Book Chapter*

Cox, F.R. and E.J. Kamprath. 1972. Micronutrient soil test. In J.J. Montvedt, P.M. Giordana and W.L. Lindsay (Eds.). Micronutrients in Agriculture, Soil Science Society of America, Madison, WI. Pp. 289-317.

*Proceedings* - Include page numbers, editor(s), title, location and dates, publisher name and location.

Chang, C.H. and S.R. Smith. 1985. Nutrient flux mechanisms in soil. Pp. 61-95. In J.L. John and J.R. Sims (eds.). Nutrient availability proc. workshop. International Crop Research Inst. Beckley, WV. November 30-December 1, 1984. Hillcrest, Morgantown, U.S.

**Dissertations and Theses** - Include dissertation abstract number if available)

Rajan, F.C. 1981. Phosphorous transformation in acid soils. Ph.D. dissertation. Valley State University, Valley, WV. (Diss. Abst. 86-2544).

**Miscellaneous Publications**

Waaleigh, C.H. 1968. Wastes in relation to agriculture and forestry, USDA Misc. Publ. 1065. U.S. Gov. Print. Office, Washington, D.C.

**Table 1. Objectives, notional targets, benchmarks and indicators, throughputs, and milestones**

<b>Objectives</b>	<b>Targets</b>	<b>Benchmarks and Indicators</b>	<b>Throughputs</b>	<b>Milestones</b>
1. Supply chain/market development	<ul style="list-style-type: none"> <li>- Increased yields and incomes</li> <li>- Increased pearl millet quality</li> <li>-Increased use of sorghum as a feed source</li> </ul>	<ul style="list-style-type: none"> <li>- Increased farmer incomes</li> <li>- Increase in production area</li> <li>- Elimination of tannin in feed–type cultivars</li> </ul>	<ul style="list-style-type: none"> <li>- Farmer incomes increased by 30%</li> <li>- Farmer incomes increased by 20%</li> <li>- 200% increase in markets for sorghum as a feed source</li> </ul>	<ul style="list-style-type: none"> <li>- 15% increase by Yr 3 and 30% by Yr 5</li> <li>- 5% increase by Yr 3 and 20% by Yr 5</li> <li>- 60% increase by Yr 3 and 200% by Yr 5</li> </ul>
2. Nutrition, health and grain quality	<ul style="list-style-type: none"> <li>-Higher grain quality cultivars</li> <li>-New cultivar acceptance</li> <li>- Increased nutrition of food and feed products</li> </ul>	<ul style="list-style-type: none"> <li>- High digestibility cultivars selected</li> <li>- Widespread adoption of cultivars</li> <li>- High starch digestibility cultivars developed</li> </ul>	<ul style="list-style-type: none"> <li>- 10 high grain quality varieties developed</li> <li>- 60% of farmers accept new cultivars</li> <li>- Nutritional deficiencies in diets decreased by 25%</li> </ul>	<ul style="list-style-type: none"> <li>- 4 varieties released by Yr 3 and 10 by Yr 5</li> <li>- 20% of farmers accept new cultivars by Yr 3 and 60% by Yr 5</li> <li>- 10% decrease by Yr 3 and 25% by Yr 5</li> </ul>
3. ICSM	<ul style="list-style-type: none"> <li>- Increased and stable grain yields</li> <li>- Improved crop, soil and water management</li> </ul>	<ul style="list-style-type: none"> <li>-ICSM components identified</li> <li>- Integration of ICSM components into packages</li> </ul>	<ul style="list-style-type: none"> <li>- 30% yield increase due to ICSM adoption</li> <li>- 70% of farmers using ICSM practices</li> </ul>	<ul style="list-style-type: none"> <li>- 10% increase by Yr 3 and 30% by Yr 5</li> <li>- 25% using ICSM practices by Yr 3 and 70% by Yr 5</li> </ul>
4. IPM	<ul style="list-style-type: none"> <li>-Increased grain quality</li> <li>- Efficient pest management tactics</li> <li>-Reduced pesticide use</li> </ul>	<ul style="list-style-type: none"> <li>- Tolerance to grain insects, pathogens</li> <li>- IPM packages developed</li> <li>- Non-pesticidal strategies developed</li> </ul>	<ul style="list-style-type: none"> <li>- 20% decrease in insect-damaged grain</li> <li>- 4 varieties with insect resistance released</li> <li>- 50% decrease in kg pesticide used/ha</li> </ul>	<ul style="list-style-type: none"> <li>- 5% decrease by Yr 4 and 20% by Yr 5</li> <li>- 1 variety released by Yr 3 and 4 released by Yr 5</li> <li>- 20% decrease by Yr 3 and 50% by Yr 5</li> </ul>
5. Genetic enhancement	<ul style="list-style-type: none"> <li>-Stable yielding genotypes</li> <li>-More efficient water use by genotypes</li> <li>-More efficient nutrient use by genotypes</li> </ul>	<ul style="list-style-type: none"> <li>- Genotypes with less variation in yields</li> <li>- Decrease in drought damage</li> <li>- Savings in fertilizer costs</li> </ul>	<ul style="list-style-type: none"> <li>- 6 stable yielding genotypes released</li> <li>- 10 drought tolerant genotypes released</li> <li>- 4 N efficient genotypes released</li> </ul>	<ul style="list-style-type: none"> <li>- 2 genotypes released by Yr 3 and 6 by Yr 5</li> <li>- 4 genotypes released by Yr 3 and 10 by Yr 5</li> <li>- 1 genotype released by Yr 3 and 4 by Yr 5</li> </ul>
6. Genetic resources and biodiversity	<ul style="list-style-type: none"> <li>-Higher yielding genotypes</li> <li>-Conservation of genetic biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>- Selection of high yielding genotypes</li> <li>- Decrease in rate of loss of biodiversity sensitive areas</li> </ul>	<ul style="list-style-type: none"> <li>- 25% increase in yield of new genotypes</li> <li>- 20% decrease in use of biodiversity sensitive areas due to increased yields</li> </ul>	<ul style="list-style-type: none"> <li>- 10% increase in yield by Yr 3 and 25% by Yr 5</li> <li>-5% decrease in use of biodiversity sensitive areas by Yr 3 and 20% by Yr 5</li> </ul>
7. Partnerships and networking	<ul style="list-style-type: none"> <li>- Increased joint programs with partners</li> </ul>	<ul style="list-style-type: none"> <li>- Networks established involving all stakeholders (private industry, NGOs, farmers, international agencies, CG centers, research and technology transfer agencies )</li> </ul>	<ul style="list-style-type: none"> <li>- High research throughputs and high level of technology transfer activity</li> </ul>	<ul style="list-style-type: none"> <li>- 20% increase in grain production and 75% of farmers using best management practices by Yr 5</li> </ul>