6 July, 2009

Integrated Pest Management Collaborative Research Support Program (IPM CRSP)

Request for Applications for Regional and Global Theme Programs

Schedule of Relevant Dates

Date of Release:	July 6, 2009
Proposal due date:	Aug. 10, 2009
Expected selection announcement:	Sept. 10, 2009

This request for applications is issued by the Management Entity (ME) of the IPM CRSP at Virginia Tech, Blacksburg, VA, 24061-0378 USA.
Website: http://www.oired.vt.edu/ipmcrsp/index.htm
Email: ipm-dir@vt.edu Tel: 540-231-3516
All proposals must be submitted by e-mail and in hard copy.

Request for Applications under the Integrated Pest Management Collaborative Research Support Program (IPM CRSP)

Notice: Funding and awards under this RFA are subject to final USAID approval of the October 1, 2009 to September 30, 2014 IPM CRSP extension.

Program Description
The Integrated Pest Management Collaborative Research Support Program (IPM CRSP) invites proposals for regional and global theme programs. This call for proposals is open to all U.S. universities eligible under Title XII legislation.

The IPM CRSP intends to fund as many as six regional programs for $225,000 to $400,000 annually for five years. Each award will support a regional IPM program in one of the following regions:

Central Asia (Kyrgyzstan, Tajikistan and Uzbekistan)	**$250,000/year**
East Africa (Kenya, Tanzania, and Uganda)	**$300,000/year**
South Asia (Bangladesh, India, and Nepal) (India - $180,000, Bangladesh - $125,000, and Nepal - $75,000)	**$380,000/year**
Southeast Asia (Indonesia and Philippines)	**$225,000/year**
Latin America/Caribbean (Dominican Republic, Ecuador, Guatemala, and Honduras)	**$330,000/year**
West Africa (Ghana, Mali, and Senegal)	**$300,000/year**

Five global theme programs will be funded at $65,000 to $150,000 annually for five years, depending on the program. Global theme programs (except the *Parthenium* program) in host countries will be financed through required buy-ins from the regional programs. A global theme program will be awarded for each of five priorities (exclusive of buy-ins):

Plant Virus Diseases	**$150,000/year**
International Pest Diagnostic Laboratories	**$90,000/year**
Impact Assessment	**$65,000/year**
Invasive Species Program on Parthenium	**$105,000/year**

Coordination of Gender Knowledge and Application **Not in current competition**

Annual allocations for selected proposals are contingent on performance and the level of annual funding received by the IPM CRSP from USAID.

Goals and Objectives of the IPM CRSP

The IPM CRSP is funded by the Agriculture Program of USAID's Bureau for Economic Growth, Agriculture and Trade (EGAT/AG). EGAT strengthens agriculture's contribution to broad-based economic growth, better health, and improved natural resources management through three interlinked programs: 1) development and dissemination of innovative food-based technologies; 2) formulation of agricultural-led economic growth; and 3) improved competitiveness and capacity to access markets. The Collaborative Research Support Programs (CRSPs) were initiated by USAID to link the capabilities of the U.S. land grant universities and their public and private partners to the needs of developing nations worldwide.

The IPM CRSP has been designed to contribute to EGAT's strategic objectives and to complement the economic growth and food security efforts of USAID missions and other USAID bureaus. The IPM CRSP implements participatory, farmer-focused, innovative, interdisciplinary research, training, and outreach programs in IPM. The goals of the IPM CRSP are to:

- measurably reduce crop losses due to pests
- improve food security
- increase farmer income while reducing pesticide use
- reduce residues on export crops
- improve IPM research and education program capabilities
- improve ability to monitor pests
- increase gender equity and involvement of women in IPM decision-making and program design.

The **objectives** of the IPM CRSP through which these goals are addressed are to:

1. Advance IPM science and develop IPM technologies, information, and packages (systems) for sound resource management;
2. Improve IPM communication and education, and the ability of IPM practitioners to manage knowledge, resulting in widespread adaptation, adoption, and impact of ecologically-based IPM technologies, practices, and packages;
3. Provide information and capacity building to reform and strengthen policies and local/national institutions that influence pest management; and
4. Develop and integrate sustainable resource-based, local enterprises into national regional and global markets.

The IPM CRSP is a collaborative effort between U.S. and host country scientists and includes the participation of farmers, international agricultural research centers (IARCs), non-

governmental organizations (NGOs), private sector groups, and relevant public agencies. The IPM CRSP technical approach is to implement Ecologically-based, Participatory IPM (EP-IPM) programs with a strategy for local, national, regional, and global diffusion of IPM capacity and knowledge. Broad participation and communication are critical components of the strategy, along with a competitive process and a management plan designed to ensure high quality research and accountability. EP-IPM programs are focused around regional centers of excellence and global IPM themes.

Descriptions/reports of the current activities can be found on the IPM CRSP website: http://www.oired.vt.edu/ipmcrsp/index.htm

Technical and Programmatic Considerations for Applications

1. The institution taking the lead in submitting a proposal must be a U.S. university, with other host country, international, and U.S. institutions integrated into the proposed effort. Programs must include a multi-institutional approach to IPM research, training, and outreach. Proposals should foster linkages with U.S. minority institutions (such as 1890 and 1994 land grant universities), international agricultural research centers (IARCs), NGOs, and other private sector organizations, national agricultural research institutions, and other CRSPs, wherever appropriate.

2. Programs must address IPM problems and demonstrate potential for significant impact within the selected region or global theme within a five-year period. Regional programs must focus on a set of crops (a minimum of two crops per region) for which IPM packages are to be developed. Policy problems should also be identified and addressed. An example of the basic components of an IPM package for a generic crop might look as follows:

    a) **Soil preparation:** Prepare the soil properly and apply tactics such as soil solarization and fertilization with a combination of compost, neem cake, or mustard cake and vesicular arbuscular mycorrhizae (VAM) to increase nutrient availability to vegetable crops and reduce the incidence of nematodes and weeds. These tactics help to build up beneficial soil microbes that improve nutrient availability to plants.
    b) **Seed selection:** Select seed varieties that produce crops resistant to insects and diseases, produce high yields and plants that are acceptable to consumers. Pest-resistant varieties can reduce pesticide costs, increase yields, and increase profits.
    c) **Seed treatment:** Treat seeds with the fungus *Trichoderma sp.* and the bacteria *Pseudomonas fluorescens* and *Bacillus subtilis* to protect seedlings from fungal, bacterial, and nematode attacks and defend seedlings against diseases.
    d) **Seedling nursery:** When feasible, make sterilized nursery media. The nursery should be screened to prevent viruses vectored by insect pests. Irrigation should be regulated to prevent excessive watering, which increases the incidence of fungal diseases.

e) **Seedling selection:** Examine all seedlings in the nursery for diseases. Virus-infected and unhealthy seedlings should be eliminated from the planting material.

f) **Physical/mechanical tactics:** Use IPM tactics, such as staking, mulching, hot water treatment and hand or mechanical weeding which can reduce the incidence of insects, diseases, and weeds. For example, staking tomatoes to keep them off the ground and away from moisture can reduce late blight infection and fruit rot. Establishing the proper timing for and number of applications of weed control (hand or mechanical) minimizes labor and chemical costs for realizing optimal yields. In many cases, one or two hand or mechanical weed control applications and/or mulching are economically optimal.

g) **Grafting:** Grafts of high-yielding scions on disease-resistant rootstock to control soil-borne fungi, bacteria and nematodes. In addition, providing disease resistance and grafting helps to increase the yield and robustness of plants such as tomato, eggplant, cantaloupe, and watermelon.

h) **Traps:** Use blue or yellow sticky traps in fields to reduce pest populations such as aphids, thrips and whiteflies. Sex pheromone traps can be placed in fields to give local or area-wide population monitoring data. These data can be used to indicate when treatment is necessary, avoiding unnecessary treatment expenses and making timing of treatments more targeted.

i) **Biopesticides:** Use biopesticides when economically feasible. Biopesticides typically have a very narrow range of target species upon which they act. Biopesticides are nontoxic to humans and do not have negative non-target effects. Because they have minimal impact on beneficial parasitoids and pest predators, these natural enemies can serve as regulators of a variety of pests. By using biopesticides, the use of synthetic pesticides can be reduced or eliminated. An example is the nucleopolyhedrosis virus (NPV), which is sometimes locally available either as a commercial product or as a home-made concoction that can be made from infected caterpillars found in the garden.

j) **Natural enemies:** Use local natural enemies, such as predatory mites, for control of phytophagous mites in strawberries, which reduce the need for pesticide applications. Inundative release of parasitoids, such as *Trichogramma* spp. and *Bracon* spp., and predators such as the earwig *Euborellia* sp., and green lacewing *Chrysoperla* sp., can be used to control caterpillar pests in vegetable crops.

k) **Others:** Any additional components/tactics that could be incorporated into the package.

3. The approach to program development must be participatory and facilitate interactions among farmers, scientists, and extension workers, the private sector, USAID personnel, and other stakeholders.

4. The IPM CRSP is committed to ensuring that priority pest management problems are decided with consideration of gender issues. Regional programs must include a multidisciplinary approach incorporating both technical and social sciences inclusive of social/cultural/economic research that generates gender knowledge and its application. Proposals must elaborate a strategy to address gender constraints and opportunities. The participatory process used to design programs requires inclusion of

women growers for guidance. However, in order for women to benefit as intended, the knowledge of IPM packages thus generated must be transferred to women, and the resources required for such packages must be within women's resources. Generating gendered knowledge of decision making, resources, and technology transfer are essential to meeting the IPM CRSP's goals. The new phase of the IPM CRSP will ensure that gender knowledge and application are central to research and extension within each regional program by dedicating a portion of each regional program to gender training and research questions. Surveys and other quantitative research methods will be employed to determine gender roles in IPM decision making, knowledge, and networks. Qualitative methods such as participatory appraisals and case studies of representative household and other production units should also be used to clarify gendered decision processes and adoption patterns, pesticide exposure, and access to agricultural inputs and credit. All programs must include gender activities.

5. A biotechnology/biosafety component may be included when a biotechnology approach is best suited to a priority pest management problem. Transgenic modified crops that have been released for cultivation in a host country should be included in the IPM package development as appropriate.

6. Proposals for regional programs must contain a plan for technology dissemination and adoption. Regional programs will leverage a variety of resources, such as cooperation with NGOs, to extend the results of the CRSP. Innovative means of promoting adoption of IPM packages should be described. Global themes should describe how research results and IPM information will be transmitted broadly within countries, regionally, and globally.

7. Proposals should include a plan for training, both degree and short-term scientist training, recognizing that details of the plan will need to be completed once the project is underway and a detailed assessment of training needs is completed. Whereas the majority of graduate training is expected to be for host country researchers, training American graduate students about globally important agricultural issues is part of the benefit CRSPs bring to the United States. Host country graduate students should be from host country institutions or otherwise be in a position to continue IPM work in their home country after studies are completed. Joint graduate student funding between regional programs and global themes is encouraged.

8. Each regional program proposal must include a description of how it will integrate with the global themes, and each global theme proposal must describe how it will integrate with the regional programs. Every regional program will budget $10,000 per year each for the following global themes: plant virus diseases, international pest diagnostic laboratories, impact assessment, and gender knowledge and its application. These allocations will be spent in concurrence with the PIs of global theme programs.

9. At least 50% of the funds must be expended in or on behalf of the HC or region.

10. U.S. institutions are required to provide a 25% cost-share commitment. (see budget preparation instructions for cost-share details)

11. Regional program proposals must include a plan that describes how core participating countries will collaborate within the region, and how information will be disseminated to other countries within the region.

12. Once programs are established, in-country planning and review meetings will bring U.S. and host country participants together at least annually to develop work plans, assess progress, and communicate results.

13. Progress on each IPM CRSP program will be reviewed annually by a Technical Committee (TC) internal to the IPM CRSP and every two years by an External Evaluation Panel, approved by USAID and appointed by the ME. Continued funding will be contingent on satisfactory progress in achieving proposed objectives. Program leaders will be members of the TC and must budget travel for a two-day domestic meeting each year.

14. Successful programs must conform to IPM CRSP policies as described in the Policies and Operating Procedures Manual (http://www.oired.vt.edu/ipmcrsp/IPM_2008/IPM%20POPs%20Manual%205%20may%2008_new.pdf) and as subsequently amended by the Program Advisory Board.

15. Programs must adhere to USAID environmental compliance requirements. Research on or application of any plant protection product (whether chemical, botanical or biological) or biocontrol agent cannot begin until the proper environmental report is prepared in collaboration with the IPM CRSP Management Entity and approved by USAID. Work plans should consider this requirement in planning field work. PI and ME responsibilities for this task may be found on the IPM CRSP website in the IPM CRSP Policies and Procedures Manual under "Environmental Compliance."

16. Applicants will describe the process for measuring performance and monitoring indicators (i.e. who, when, how, and with what resources). Applicants should select from the indicators listed below.

    Beneficiaries

    - Number of rural households benefiting directly from interventions
    - Number of vulnerable households benefiting directly from interventions
    - Number of female-headed households benefiting directly from interventions
    - Number of partner organizations and active institutional members of those partner organizations
    - Number of agriculture-related firms benefiting directly from interventions
    - Number of producer organizations, water user associations, trade and business associations, and community-based organizations assisted/benefiting

- Number of women's organizations/associations assisted/benefiting
- Number of new public-private partnerships formed/benefited
- Number of ongoing public-private partnerships assisted/benefited

Training

- Male participation in short-term training
- Female participation in short-term training
- Male participation in long-term training
- Female participation in long-term training
- Frequency and quality of female interventions in training events

Technologies

- Technologies under research
- Technologies being field tested
- Technologies available for transfer
- Hectares under new technologies
- Number of farmers adopting new technologies disaggregated by gender
- Number of processors adopting new technologies
- New surveillance systems

Policy development

- Policy studies undertaken
- Policy studies disseminated
- Number of institutions/organizations assessed
- Number of institutions/organizations undertaking capacity/competency strengthening as a result of IPM CRSP assistance
- Number of institutions/organizations mature/viable in the competency areas strengthened as a result of IPM CRSP assistance
- Number of policy reforms/regulations/administrative procedures presented for legislation/decree as a result of IPM CRSP assistance
- Number of policy reforms/regulations/administrative procedures prepared with IPM CRSP assistance passed/approved
- Number of policy reforms/regulations administrative procedures passed for which implementation has begun with IPM CRSP assistance
- Number of institutions adopting gender policies or allotting gender budget in IPM related programs

Technical and Programmatic Considerations Specific to Global IPM Theme Proposals

The following global themes are solicited for integration with all regional programs: IPM impact assessment, plant virus diseases, and international pest diagnostic laboratories. These global theme proposals should be multi-institutional, multi-disciplinary, and demonstrably linked to regional programs. A program for the management of the invasive weed parthenium is not required to work with every region, but is required to link to the East Africa program and to the IPM impact and gender global themes.

1) International Pest Diagnostic Laboratories – Prompt and accurate detection and diagnosis of plant insects and pathogens are crucial for integrated crop health management. However, researchers, extension personnel and farmers in developing countries seldom have access to modern diagnostics. Global trade in seeds, vegetative planting material and fresh produce enhance the prospect for long-distance movement of plant insects and pathogenic microorganisms. Some of these pests are currently listed as posing serious risks to U.S. agriculture. Modern diagnostic technology is critical to the interception of potentially devastating pests/pathogens before they are exported worldwide with plant material in global trade. Biotechnology-based diagnostic approaches combined with traditional microbiology and researcher training in these methods are needed, especially in export crop production areas. Techniques including polymerase chain reaction (PCR) assays and immunoassays have been developed for several pathogens, including APHIS select agents, and can be used in developing country laboratories with appropriate equipment and technical training. These assays can be used to detect pathogens in plant material, insect vectors, water, air and soil, thus providing early identification of the causal agent and ability to initiate management or eradication procedures, depending on the pathogen and crop. A system is also needed for sending insect pests to the appropriate museum for accurate identification.

The IPM CRSP is soliciting an application to develop capacity for modern diagnostics in Africa, Asia, and Latin America/Caribbean. Linkages will be expected with APHIS/OPIS, the USDA/CSREES U.S. National Plant Diagnostic Network, NARS, IARCs, private firms, and host-country and U.S. universities with expertise in diagnostics. Emphasis will be placed on identification of appropriate sites through regional participatory processes, training personnel, transferring available technology, and adapting assays to specific identified needs.

2) Plant Viral Diseases — Plant viruses can spread explosively, often kill or render plants barren, and can be difficult to manage once established. Virology expertise is often limited in developing countries, further complicating correct diagnosis and management. Management of specific virus epidemics under this global theme will utilize an integrated approach that considers relevant features of the ecology, biology, and economic impacts of virus-vector complexes. Capacity will be developed to address and respond to existing and future viral disease problems through collaboration with the regional IPM programs. A training component will be developed that strengthens institutional capacities to handle viruses within host countries.

The new phase of the IPM CRSP will have one global theme on virus disease management, with sub-programs in Africa, Asia, and Latin America/Caribbean. In the previous phase, the virus disease global theme identified the most important viral diseases of major vegetable crop(s). The new virus global theme will continue diagnostic evaluation and increase emphasis of management approaches for viruses, including cultural methods such as nursery protection, seed treatment, roguing, and adoption of disease-resistant varieties. For access to a broad range of germplasm for screening, linkages will be made with seed companies, NARS, IARCs, other CRSPs and other appropriate organizations. Applied research will examine virus-crop interactions of epidemic viruses within the overall agricultural ecosystem of a country or region.

3) Invasive Species Program on Parthenium — A program on the invasive weed *Parthenium hysterophorous* will be funded, with a focus on Eastern Africa. This invasive weed is a threat in all seasonal tropical environments. It is a major economic constraint to pastoralists and crop production in South Africa and Ethiopia, and is spreading. Management strategies for *Parthenium* in Eastern Africa should be included in the proposal, and may include cultural practices to reduce populations within cultivated fields as well as classical biological control to slow the weed's spread. While the program will focus its primary research in Ethiopia, it will collaborate with the East Africa program. It will share results with other countries in Africa and weed scientists in India, Australia, and South Africa.

4) Impact Assessment — A global theme on impact assessment will help the CRSP estimate project-wide impacts. It will provide leadership and coordination on impact assessment for each of the regional IPM programs, utilizing a common methodology for evaluating economic, environmental/health, and gender impacts of IPM programs. It will develop consistent and integrated, spatially referenced, and tabular datasets. This information can be combined with other economic, technical, and IPM adoption data to assess the impacts of specific IPM practices and packages and predict where IPM practices are likely to have the greatest impacts.

Instructions for the Preparation of Proposals

Parties who decide to lead a proposal should send an expression of intent to the IPM CRSP Program Director at ipm-dir@vt.edu copied to ipmcrsp@vt.edu. This list will be used to communicate subsequent amendments to the RFA. Amendments will also be posted on the IPM CRSP website.

Format for Applications
Proposals should cover a five-year program (from 1 October 2009 to 30 September 2014) and contain:

1. Cover sheet specifying the lead institution, lead principal investigator, PI contact information (address, telephone, fax, e-mail), and the regional program or global theme for which the proposal is targeted. Partner institutions should be listed on the cover. The original cover sheet must be signed by the lead PI and a representative of the university authorized to make contractual commitments on behalf of the lead institution.

2. Letters of support from partner institutions (e.g. U.S. universities, IARCs, NGOs, private sector entities, and host-country institutions). A letter of interest from host country institutions must also be included. If a proposal is selected, a memorandum of understanding (MOU) will be developed with each host country institution.

3. Executive Summary (one page)

4. Technical Proposal Narrative **(20 pages maximum)**
   a) Introduction, problem statement and technical objectives (region, countries, cropping systems). The section will address anticipated benefits to host countries and the United States

b) Research approach for IPM package development
c) Plan for technology transfer and short-term training
d) Plan for institutional capacity-building and long-term training
e) Plan for integrating global themes and regional programs
f) A first year work plan listing key tasks to be accomplished for each activity under each technical objective
g) Description of the expected contribution to IPM CRSP-level performance milestones and impacts and a discussion of how data will be collected on performance monitoring indicators
h) Capability of U.S. institutions, including experience and track record in the target developing countries, and a brief description of current or completed projects relevant to the proposed research
i) Capability of selected host country (HC) institutions in technology development and transfer

5. Literature cited

6. Budget (using IPM CRSP budget spreadsheets)

7. Budget narrative (an explanation of costs)

8. Brief CVs for Lead PI, other key U.S. co-PIs, and IARC co-PIs (2- page limit per CV). Regional programs also require the CV of at least one key host country co-PI.

9. Sub-Awardee Certifications and Assurances Agreement

Format:	Paper Size	Standard (8.5 x 11")
	Line Spacing	Single spaced
	Margin	1 inch on all sides
	Minimum Font Size	12 point
	File type	MSWord or pdf

Evaluation Criteria for Regional IPM Programs (RPs) and Global IPM Theme Program (GTP) Applications (110 points)

- **Relevance to IPM CRSP objectives (15 points):** Extent of multi-disciplinary and multi-institutional integration of activities into a coherent program that addresses the four IPM CRSP objectives (see page 3). Relevancy of proposed research, technology transfer and capacity-building activities to the health and prosperity of farmer households with special attention to the opportunities created for and benefits offered to women farmers, and potential for beneficial environmental impact and increased sustainability of targeted agro-ecosystems.

- **Implementation (20 points):**
  - Quality of technology transfer plan (5 points)
  - Quality of capacity-building plan (5 points)
  - Quality of Year 1 workplan (10 points)

- **Scientific merit with respect to research and IPM package development (15 points):** Demonstrated participatory methodology, expected research results and products (e.g. measured in terms of number of adopters, publications, or increased dissemination of IPM practices and technologies, models, policy changes), and innovation.

- **Partnering (10 points):** Proposed institutional partnerships, involvement of developing country stakeholders in the design and implementation of activities, and methods to assess the knowledge, attitudes and skills of targeted populations against which change can be assessed.

- **Integration of global and regional programs (10 points):** Strength of proposed linkages to other global themes and regional programs as appropriate.

- **Integration of gender knowledge and its application (10 points)**

- **Qualifications of proposed project personnel (10 points):** Demonstrated capability of project members to carry out the proposed scientific work, ability of U.S. team members to work successfully in developing countries, including appropriate language skills.

- **Potential impacts from the five year-project (10 points)**

- **Budget (10 points):** Rational distribution of resources to achieve results. Adherence to budget instructions, value (outputs in relation to total program cost), thoroughness of budget narrative and proper minimal cost-share.

Adherence to IPM CRSP Norms of Governance

Institutions leading regional or global theme programs will become partners in the IPM CRSP. Sub-award programs are subject to the normal procedures and governance mechanisms of the IPM CRSP including periodic progress reports and submission of annual workplans and budgets which are subject to approval by the IPM CRSP Technical Committee. Program leaders are responsible for ensuring that programs are implemented according to the IPM CRSP Policies and Procedures Manual.

Budget Guidelines for All Proposals

The budget format to be used can be found by clicking on the following links:

Budget Instructions:
http://www.oired.vt.edu/ipmcrsp/IPM_2008/RFA_90706/Budget_Instructions.pdf

Budget Narrative:
http://www.oired.vt.edu/ipmcrsp/IPM_2008/RFA_90706/Budget_Narrative_Form.pdf

Budget Form 1 (Excel):
http://www.oired.vt.edu/ipmcrsp/IPM_2008/RFA_90706/IPM_Budget_Form_1_070609.xlt

Budget Form 2 (Excel):
http://www.oired.vt.edu/ipmcrsp/IPM_2008/RFA_90706/IPM_Budget_Form_2_070609.xlt

The Excel templates for the two budget forms (one form to be used if the lead institution is managing all financial requirements of host countries and U.S. sub-awardees and a second form to be used if Virginia Tech will be managing the financial requirements of the sub-awardees) are accessible by links in the Budget Completion Instructions. Please note that partnerships are required for the Regional Programs and Global Theme Programs. Lead institutions will establish sub-awards with partner institutions and may take overhead for the sub-awards, except those to host country institutions. If the lead institution is not willing to waive overhead for the sub-awards for host countries, then Virginia Tech will manage the sub-awards for all partners (including the HC institutions) and waive overhead for the host country sub-awards.

- **Cost Sharing –** Cost sharing on all non-exempt program funds is required of U.S. lead institutions participating in the IPM CRSP. Cost-sharing may include but is not limited to: 1) faculty participation; 2) in-kind contribution; and 3) other cost-sharing arrangements. The cost share must consist of non-federally funded contributions that meet all the criteria detailed in 22 CFR 226.23. Cost sharing must be presented in the budget and fully explained in the budget narrative. The cost-sharing requirement for CRSPs is 25% of non-exempted USAID funds as described in the Cooperative Agreement[1*] with USAID.

- **Indirect Costs for U.S. institutions and CGIAR Centers –** For all applications, indirect costs are limited to the **lesser** of federally negotiated off-campus research rates or 30 percent of modified total direct costs for U.S. universities, CGIAR centers, and non-host country sub-awardees. No indirect costs are allowed on equipment and student tuition.

- **Indirect Costs on Host Country Sub-awards –** Indirect costs taken by lead institutions on sub-awards to host country organizations are prohibited. An administrative fee of no more than 10% may be taken by host country institutions and organizations.

- **Sub-awards** – The IPM CRSP sub-award policy is designed to maximize the amount of funding going to host country organizations.

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[*] The exempted costs in the current cooperative agreement are as follows:

1. Funds committed under the terms of a formal CRSP host country sub-agreement, including funds for facilities, host country personnel services, and equipment and commodity purchases by a participating U.S. institution for use by a host country entity or by the U.S. institution in a host country. Funds for these costs may be held apart in reserve by the participating U.S. institution until expended directly to a vendor for the goods and services described. Also, the funds may be passed to the host country for its purchases and use in accordance with the agreement;
2. Costs for training of participants as defined in ADS 253.

Unless changed by USAID in the new cooperative agreement, these definitions will hold.

Lead institutions that waive indirect costs on sub-awards to host country organizations may administer the host country organization sub-awards as well as the sub-awards to other participating U.S. partners and CGIAR centers that carry indirect costs.

If the lead institution is unwilling to waive host country organization indirect costs, then the ME (OIRED/VT) will manage all sub-awards. The lead institution will still be responsible for managing the programmatic components of the project. Virginia Tech will make payments to sub-awardees on receipt of invoices and copy the responsible lead institution PI so that the PI can review expenditures for appropriateness and compliance so that he/she will know what has been expended against the approved budget. This policy will be followed by all participating institutions including Virginia Tech. By avoiding a multiple overhead schedule, the ME will have more funding for the program than is otherwise possible.

Required Forms for All Proposals

Proposals that are selected for funding will be required to submit the following federal forms prior to the awarding of sub-awards. These forms **should not** be submitted with the proposal. Upon notification of a selected bidder, the ME will facilitate the bidder's satisfaction of these federal requirements.

- Part I - Certifications and Assurances
- Part II - Other Statements of Recipient
- Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions
- Key Individual Certification Narcotics Offenses and Drug Trafficking
- Participant Certification Narcotics Offenses and Drug Trafficking
- Self Certification Letter

Proposal Submission (Regional and Global Theme Programs)

1. The technical proposal must be in MSWord or pdf format. The budget must be prepared using the Excel templates of the IPM CRSP. The electronic versions should be emailed to: ipm-dir@vt.edu and copied to ipmcrsp@vt.edu. The electronic version must be received by 11 P.M. Eastern Time on Monday, August 10, 2009.

2. Do not exceed the proposal narrative page limits. Proposals exceeding the proposal narrative limits will not be considered.

3. Proposals for regional and global theme programs must have the formal signed approval of the lead U.S. institution and all partner U.S. institutions. All U.S. universities included in the proposal must have the signed approval of their Sponsored Programs/Contracts and Grants Offices.

4. Send electronic copies to ipm-dir@vt.edu and ipmcrsp@vt.edu

Clarification of the RFA

Prospective applicants desiring an explanation or interpretation of this RFA must request it in writing within 15 days of the issuance date of this RFA. Questions should be e-mailed to: ipm-dir@vt.edu. Questions will be answered and simultaneously posted to the RFA website as an amendment to the RFA. The origin of questions will be anonymous. Notice of the website posting will be given to those who have given prior notification to the ME that they intend to lead a proposal.

Any information given to a prospective applicant concerning this RFA will be furnished promptly to all other prospective applicants as an amendment of this RFA, if that information is necessary in submitting applications or if the lack of it would be prejudicial to any other prospective applicants.

Disclaimer

Pending USAID issuance of the Leader Award extension for the IPM CRSP, Virginia Tech intends to issue program grants according to the guidelines above. However, issuance of this RFA does not constitute an award commitment on the part of the Virginia Tech, nor does it commit the Virginia Tech to pay for costs incurred in the preparation and submission of an application. Applications are submitted at the risk of the applicant. All preparation and submission costs are at the applicant's expense.

Administrative Structure of the IPM CRSP

The IPM CRSP is administered as a cooperative agreement to Virginia Tech by USAID. It is managed by the Office of International Research, Education, and Development (OIRED), which houses the project's *Management Entity (ME)*. The *Administrative Principal Investigator* for the IPM CRSP is the Director of OIRED and is the person ultimately responsible to USAID for technical and fiscal matters. The *Program Director* is responsible for program development, coordinating activities across the program and overseeing the daily operations of the IPM CRSP. The *Technical Committee* provides technical guidance and oversight of the program. The *External Evaluation Panel* (EEP) will review the proposals. The EEP will be entirely independent from the ME and will consist of IPM experts having no conflict of interest (i.e. not from an institution submitting a proposal and not from Virginia Tech) The *Program Advisory Board* provides policy guidance to the ME.

List of Acronyms and Abbreviations

APHIS/OPIS	Animal and Plant Health Inspection Service/ Offshore Pest Information System
CGIAR	Consultative Group on International Agricultural Research
CRSP	Collaborative Research Support Program
CV	Curriculum Vitae
EEP	External Evaluation Panel
EP-IPM	Ecologically-based Participatory IPM
GTP	Global Theme Program
HC	Host Country
IA	Impact Assessment
IARC	International Agricultural Research Center
IPM	Integrated Pest Management
ME	Management Entity
NARS	National Agricultural Research Systems
NGOs	Non Governmental Organizations
OIRED	Office of International Research, Education, and Development
PI	Principal Investigator
RFA	Request for Applications
RP	Regional Program
TC	Technical Committee
USAID	United States Agency for International Development
USDA CSREES	United States Department of Agriculture Cooperative State Research, Education and Extension Service

IPMCRSP
Sub-Awardee Certifications and Assurances Agreement

The Authorized University/College Representative and Lead Principal Investigator must read and agree to the following (by answering yes to each item below).

We agree to:

[ ] Yes [ ] No	Submit annual work plans and the annual USAID performance monitoring indicators data by August 30 of each year.
[ ] Yes [ ] No	Submit semi-annual and annual progress reports by April 15 and October 15, respectively, each year.
[ ] Yes [ ] No	Obtain J-1 visas through TraiNet for all host country students studying in the United States who are supported by IPM CRSP, including those that entered the United States prior to IPM CRSP support with non J-1 visas.
[ ] Yes [ ] No	Only provide IPM CRSP financial support for students who are U.S. citizens, permanent residents or host country nationals. Students from other countries may be cost-shared to the project.
[ ] Yes [ ] No	Follow IPM CRSP's USAID Marking and Branding Policy in the publication of all papers, reports, articles, book chapters, and presentations, and provision of equipment to host country partners.
[ ] Yes [ ] No	Describe in advance any project activities involving pesticides and genetically modified and exotic alien organisms. Such practices will require sub-awardees to prepare an Initial Environmental Examination (IEE) as defined by 22 CFR 216 as well as approval by the ME and USAID before the proposed activities can be implemented.
[ ] Yes [ ] No	Provide copies of all project-generated information resources to the ME.

We understand that failure to comply with these items will result in either withholding of invoice reimbursements until compliance is achieved or termination of the award.

Signatures:

_____	_____
Principal Investigator	Date
_____	
Print name	
_____	_____
Authorized University/College Representative	Date
_____	
Print name	

Leader with Associate Cooperative Agreement No. EPP-A-00-04-00016-00: The Integrated Pest Management Collaborative Research Support Program

Branding Strategy

1. Positioning

a. Intended name of activity: Integrated Pest Management

USAID Identity: All materials developed as a result of this activity will contain the following attribution statement:

This [publication/product] was made possible by the United States Agency for International Development and the generous support of the American people through USAID Cooperative Agreement No. EPP-A-00-04-00016-00.

All publications developed through this project, with the exception of research articles published in academic journals, will also display the approved USAID identity graphic and conform to other requirements of the USAID Graphic Standards Manual.

b. Program logo: A new logo will not be developed for this activity. Logos that will be used include the USAID identity graphic and the existing logo for the IPM CRSP LWA:

2. Program Communications and Publicity

a. Audience: The primary audiences for this project are agricultural researchers, extension workers and policy-makers in host countries. The secondary audiences are other development specialists and researchers as well as farming households in host countries.

b. Communications materials used to explain the program to beneficiaries: Field demonstrations, farmer field schools, brochures, booklets, posters, manuals and guides, and web sites.

c. Main program message: The IPM CRSP communicates to farmers and those involved in agricultural trade and policy-making that by using best practices in IPM, they will not only be

improving their own economic well-being and health, but also the health and sustainability of the environment. To foreign government and USAID representatives, IPM CRSP communicates that IPM is a sustainable, healthy, highly remunerative pathway of development.

d. Host country citizen awareness and participation: In most cases, IPM host country counterparts will publicize the program within their agency or to the local broadcast or print media. All collaborators are informed of USAID requirements in branding, and branding requirements will be included in all subcontracts.

3. Acknowledgements

a. Host country government ministry involvement: Host country government ministries are involved in the IPM CRSP in the many countries around the world where the IPM CRSP is a presence, e.g.: Bangladesh, Dominican Republic, Ecuador, Ethiopia, Ghana, Guatemala, Honduras, India, Indonesia, Kenya, Kyrgyzstan, Mali, Nepal, Philippines, Senegal, Tajikistan, Tanzania, Uganda, and Uzbekistan. In each country, our subcontractors are informed of marking requirements.

b. Logos or identities of other groups that may be used on program materials: These include the logos of host country ministries or organizations as well as other U.S. universities with which the IPM CRSP collaborates, in addition to the logo of any other donor organization that may provide co-funding for program activities. IPM CRSP works with 22 partner universities in the United States and at least 50 host country institutions, in addition to several international agricultural research centers.

Marking Plan

1. All printed material and reports will have the USAID logo printed on them along with those of the IPM CRSP and participating U.S. universities and host country organizations.

2. Laboratory equipment, field equipment, computers, projectors, cameras, vehicles, and other appropriate items will be marked with a suitable USAID logo, usually adhesive labels.

3. When logos other than the USAID are displayed alongside the USAID logo, the USAID logo will be of a size and prominence equivalent to that of the other logos.

4. The USAID logo will be prominently displayed for maximum visibility.

5. The support of USAID will be mentioned in media releases and in radio and television programs.

Marking under USAID-FUNDED Assistance Instruments

Virginia Polytechnic Institute & State University shall ensure all programs, projects, activities, public communications, and commodities the Agency partially or fully funds to be marked with the new USAID Standard Graphic Identity.

[Original signed by Linda Bucy] 6/29/09

Linda Bucy Date
Assistant Vice President
for OSP Administration