QUESTIONS FOR FIELD RELEASES LESS THAN 10 ACRES

These questions are intended for proposed field use or field research involving live microbial organisms or products containing live microbial organisms which may act to benefit plant growth in a variety of ways. THESE QUESTIONS ARE NOT FOR FIELD RESEARCH WITH PLANT PATHOGENS

This information is helpful to APHIS and our responsibility to comply with applicable parts of the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). Responses to these questions and other information will support the determination that further detailed analysis and consultation is not needed, or to identify the situations and conditions when such analysis or consultation may need to be conducted. **These determinations must be made prior to permitting your proposed field research**. Answers to questions #4 and #5 are often particularly helpful. Data can be provided by literature citation or via a URL. If the literature is not in English do not submit until requested by APHIS.

INFORMATION ABOUT THE ORGANISM(S)

Fill out one questionnaire for each organism/isolate. When the same information applies to more than one isolate, you may simply note "same as *Genus species* isolate"

Part A: The organism and what it affects

Name of the Organism:

1. What is the scientific name of your organism? Provide any information you have regarding how this was determined (i.e., BLAST of sequence of a particular region of the genome, phylogenetic analyses)

2. Where was this culture/isolate originally collected?

3. How does this organism act to benefit plants – please select one of the four options below and explain any mechanisms (an example under "a" might be "produces a toxin which causes gut paralysis in Coleoptera when ingested"). Please answer under the appropriate subpart (a, b, etc.) below. Explain specific mechanisms, if known. IMPORTANT NOTE: If these mechanisms are not known or are being investigated simply say "not known/uncertain" and outline possible benefits being researched. If this question is left blank, APHIS must assume highest risk known for the taxon.

- a. Does your organism affect invertebrate plant pests? How?
- b. Does your organism affect plant pathogens? How?

c. Does your organism benefit plant growth through non-biopesticidal/nonbiocontrol mechanisms, such as increased water or nutrient uptake, increased root growth, etc.? Please indicate the mechanism.

d. Is your organism a competitor to plant pathogens, or a hypo virulent strain of a plant pathogen with less detrimental effects? Explain.

e. Not sure/Don't know: What activity or effects are you investigating (pathogenicity to insect pests? Nematodes? Plant pathogens? Other?)

If your organism was originally collected from a foreign country, (or HI or a territory or

possession of the United States, please answer the following additional questions:

Part B: For Foreign isolates

4. Is the same *species/strain* of the organism found in the US? Explain, and provide references or documentation for each species proposed. Provide molecular basis for the determination (e.g., 16s RNA sequence comparisons, phylogenetic analyses, genetic comparisons, etc.), and biological properties of the organism you want to use. Provide available additional information about how common and widely distributed this species is in continental U.S.

FOR PATHOGENS OF INVERTEBRATES

5. What is the host range of your organism? What groups are typically or mostly affected? (For example, 'This strain is pathogenic to Coleoptera, especially Scarabaeoidea'.)

FOR BIOCONTROL OF PLANT PATHOGENS

6. What is the habitat or environmental conditions where the organism is typically found? Alternatively, what were the conditions or environment for collection of this organism?

INFORMATION ABOUT THE FIELD TEST SITE

To determine the presence or proximity of threatened and endangered species, applicants should use the resources at: <u>http://ecos.fws.gov/tess_public/StartTESS.do</u> to search by State and County <u>http://www.fws.gov/Endangered/wildlife.html</u> to find proposed species. Additional data can be found at: <u>http://www.natureserve.org/explorer/servlet/NatureServe?init=Species</u>,

- 1. Describe the where the field release will occur and how it will be performed.
- 2. Has the site been historically managed or unmanaged?
- 3. Provide the name of the county/counties where the test will performed and the acreage in each county.
- 4. Will plant pests or (noxious) weeds be used as part of the test? If yes, will natural infestations/ infection be used or will pests be artificially introduced? Is the plant(s) insect pollinated? If a crop plant will be used for the field test, describe how the food (feed) will be handled to ensure that it will not get in the commercial food supply.
- 5. Determine what federally listed threatened or endangered species or species proposed for listing are in the test site area (particularly those related to the target/ host range of your isolate/species). Resources available for this are: http://ecos.fws.gov/tess_public/StartTESS.do to search by State and County, and http://www.fws.gov/tess_public/StartTESS.do to search by State and County, and http://www.fws.gov/Endangered/wildlife.html to find proposed species.
- 6. Determine if designated critical habitat or proposed critical habitat is within the action area. The FWS website (<u>http://crithab.fws.gov</u>) can be used to obtain information at the county level. Actions within designated critical habitats are usually restricted, regardless of the potential of your isolate to harm the protected species. If there is designated critical habitat in the county where your field research is planned, or is otherwise in close proximity, name the species and taxonomic group to which it belongs. Describe the distance, habitat similarity (or dissimilarity) and any other information you feel is

relevant.