Cooperative Extension Venture Capital Fund Proposal

I. Title of Proposed Project

The Home-Use Pesticide Database

II. PI Name(s) and Contact Information (PI, or at least one Co-PI, must be an Extension employee)

Bob Hammon, CSU Cooperative Extension, Tri River Area, PO Box 20,000-5028, Grand Junction CO 81502-5028; bob.hammon@mesacounty.us; (970) 244-1834 voice, 9970) 244-1700 fax

Dr Whitney Cranshaw, Bioagricultural Science and Pest Management, Colorado State University, Fort Collins CO 80523-1177, whitney.cranshaw@colostate.edu; (970) 491-6781

III. Will this be a state-wide project, or have multi-county emphasis? If multi-county, list all counties that will be participants.

The project is state-wide, with significant national application. Major participants will be located in Mesa County and at CSU campus, but participants from any extension office in the nation will be welcome.

IV. Indicate which Core Competency Area(s) this work falls under, or if it addresses the Front Door mission of the University.

Natural Resources and the Environment
Competitive & Sustainable Agricultural Systems

V. Cooperative Extension Work Team Affiliation

Pest Management

VI. Situation Statement

More than 1000 pesticide products, representing more than one hundred active ingredients, are available to anyone who wishes to purchase them over the counter at garden and home improvement centers, hardware and discount stores and even supermarkets. The diversity of products available for any given use (fly, ant, cockroach, or other insect, weed, or disease control) can be significant, and choosing the best material for the job can be difficult. Trade names are constantly changing, new active ingredients come on the market, and old ones are pulled from the market. Extension publications tend to avoid mention of trade names for several reasons, while consumers ask: “What product do I buy?”

There are several web sites that list commercial pesticides and their labels, but none that have a comprehensive up-to-date listing of pesticides available on the home-use market. There is no other web site with a searchable database of home-use pesticide products.

Information on over the counter pesticides is often hard to find, with the viewpoint of the web site owner often biasing the information. Extension publications are often written for commercial applicators, whether it be for food production, or residential pests. Many of the materials mentioned in these publications are only available in large (and expensive) packaging, or are restricted use, making them unavailable to the typical homeowner. Many publications use somewhat technical language, which is often not understandable to the lay public.

A site dedicated to educating the public in all aspects of home use pesticide use is needed. It needs to include a searchable, up to date, comprehensive database of pesticides that are available over the counter. It also needs to have information on pesticide efficacy, use, toxicology, and a glossary of commonly used terminology. All of this has to be presented in an easy to use format.

The Home Use Pesticide Database has been in development for more than a year by Bob Hammon at the Grand Junction site of Tri River Area Cooperative Extension office. It went on line during the first week of June 2006 after a two month troubleshooting period on the CSU development WWW server. It is at http://homeusepesticide.org. The Home-Use Pesticide Database is intended to address the needs outlined above, and is still in its earliest development stages. The searchable database was
considered the centerpiece of the site, as that is what will attract users. We intend to add the educational aspects of the site in a format associated with reports generated by searches that makes them easily accessible and understood.

VII. Project Description

The goal of the Home Use Pesticide Database is to become the standard national reference site for over the counter pesticide information. In doing so, we hope to generate enough revenue, through local and national industry and retail sponsorship, to cover all costs, including labor, materials, hosting costs, publicity, and travel. This database, readily available through the web, with easy to understand information on pesticides, will improve the efficiency of homeowner pesticide use. This in turn, leads to an improvement in human, animal, and environmental health. The Home-Use Pesticide Database is currently on line at http://homeusepesticide.org. The database is an up to date compilation of over the counter pesticide product information, labels, and links, arranged in an easy to use format. Users can select the type of pesticide they are looking for (insecticide, herbicide, rodenticide, etc.), and then further select from uses within the initial classification. The listing of registered products that is displayed for each search contains a direct link to the product label, or an information page that is specific to that product. We plan on expanding the site to include information on pesticide chemistry and toxicology, mixing and using pesticides, calibration of sprayers, pesticide efficacy, and other pertinent information that is written in an easy to understand style. We also plan on developing an extensive links page so consumers can easily find extension or other information sites to help them take the best pest management decisions.

This web site is unique in that it is a dynamic, searchable, up to date listing which focuses on selection of the proper pesticide for a job. Other sites focus on pests and their manage ment, alternatives to pesticides and hazards of pesticides. There are a few sites that discuss home use pesticides and some have static lists of available materials and active ingredients. They tend to be difficult to use, and are quickly outdated. They are often lists of trade names and active ingredients, and none have links to product labels. This site will cater to the individual who has taken the decision to spray, but needs help in choosing the proper product. We plan on using floating information boxes, an interactive glossary, and other web programming to make finding information easy and interesting. When a report is generated, it will be a simple mouse click on the active ingredient to get a comprehensive description of the efficacy against different pests, environmental hazards, and an overview of its use history from a variety of viewpoints.

VIII. Anticipated Impacts/Outcomes of this Work

Short-term impacts – People who utilize this site will increase their knowledge regarding the types and diversity of pesticides available for any particular pest control issue. This increased knowledge will translate to better choices regarding the proper materials and application methods.

Mid-term impacts – Users of the site will improve the efficiency of their pest control actions. They should be able to find information regarding the best pesticide for the job and the best container size to avoid waste or unnecessary storage. Proper choices will translate to less waste and an overall reduction in pesticide use.

Long-term impacts – More efficient use of insecticide will lead to fewer environmental and non-target impacts from homeowner applied pesticides. Increased performance will improve the quality of landscapes, home garden vegetables and fruit, and decrease the impacts of insect, weed and plant disease pests on the environment.

IX. Partnerships

This web site is being utilized by people across the US. When fully operational, many types of public agencies (State Extension Services, USDA,EPA, Municipalities, etc), businesses and individuals will be accessing it. New partnerships between Extension and individual pesticide sellers and manufacturers will be created. Local Extension agents will be encouraged to visit home use pesticide retailers to survey what is on the shelf, and to solicit sponsorships for the web site. Links to and from other sites should acquaint many individuals to CSU.
X. Action Plan, including a Time Line for the Project

The home use pesticide database web site came on line in early June 2006. We intend to expand the educational aspects during the winter of 2006-07, and then update the database during the spring of 2007 and annually in subsequent years as new pesticide products appear on the shelves. The funding we are asking for will primarily be used to pay technicians to survey Grand Junction and Fort Collins retailers for pesticides, and search the Internet for labels, links and other information. This information will be incorporated into website improvements, expansion and updates.

We will form an advisory committee during the fall of 2006, drawing members from CSU cooperative extension county and campus personnel, retailers, and pesticide manufacturers. The educational format of the site will be designed with input from the committee. The text of the educational pages will be written by Hammon, Cranshaw, and committee members, and then incorporated into the web site as soon as they pass committee review.

The web site is currently hosted on the CSU server, wsprod.colostate.edu/cwis487/, with the domain name homeusepesticide.org registered through Network Solutions. Web site maintenance and will be done by Erik Hedl, Palisade CO. He will be responsible for maintaining and uploading current files, and designing a protocol for updating the database on a timely basis. Erik has committed to acting as webmaster through the funding period.

XI. Evaluation Plan to Document Outcomes/Impacts

Site use will be monitored by use counters on each page. User feedback is encouraged and a site evaluation and impact survey page will be created for user input. Site use statistics are critical for marketing the site to sponsors. Impact evaluation will be estimated using the survey page data.

XII. Sustainability Statement

We intend for this site to be self-supporting within the next three to five years. We will apply for EPA Pesticide Environmental Stewardship Program (PESP) and/or HUD Healthy Homes funding for 2008-09, and for the site to generate its own funding through retailer/manufacturer sponsorship after that point. It is our intention to make the web site free to the end user.

We intend to generate funds through sponsorships. The pesticide report format will be modified so users will be able to find retail outlets where listed pesticides are available. The availability listings will be limited to project sponsors. When an outlet agrees to be a sponsor (and pays a standard sponsorship fee) they will submit a list of their pesticide inventory. When the site user asks for an availability listing, a series of location menus (state:county:city) will take them to a listing of sponsors that carry the material they are interested in. A rate structure, yet to be determined, will differentiate between large national outlets, and small market outlets owned by individuals.

County Extension Agents (or other project cooperators) will be free to solicit sponsors, and they will be paid a percentage of the sponsorship fees that they collect. Sponsorship revenues that go to the project will be used to pay salary, and web maintenance, and administrative costs to maintain the site. Money that is generated by local agents for soliciting sponsorships can be spent in any manner that is acceptable to the soliciting agency.
XIII. **Funding Request and Budget Narrative**

We are requesting a total of $15,000: $7500 per year for two years. All funds will be used to pay technician and webmaster salary. The money will be evenly split between the Hammon (Grand Junction) and Cranshaw (Fort Collins) technicians, and the webmaster (Erik Hedl, Palisade CO). Technician time will be needed for the pesticide survey and for designing and writing additional pages on the web site. All additional money for travel, supplies and other expenses will come from Hammon and Cranshaw discretionary funds and funds generated by project sponsorship. Bob Hammon has already invested more than $10,000 in discretionary funds to develop the site to its present form.

<table>
<thead>
<tr>
<th></th>
<th>2006/07</th>
<th>2007/08</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hammon technician</td>
<td>$2500</td>
<td>$2500</td>
</tr>
<tr>
<td>Cranshaw technician</td>
<td>$2500</td>
<td>$2500</td>
</tr>
<tr>
<td>Webmaster (Erik Hedl)</td>
<td>$2500</td>
<td>$2500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$7500</td>
<td>$7500</td>
</tr>
</tbody>
</table>