#### **QUESTIONNAIRE (continued)**

2. This sample was taken from \_\_\_\_\_ lbs of loose cells.

If the bees are your own punch-out, rather than purchased from a dealer, please answer the following questions:

**3.** What nesting material were used for bees in this sample (loose cell only):

Poly boards Wood laminate Other:\_\_\_\_\_ Wood (Dority) boards Poly laminate Cardboard

#### **4.** Before going into the field nesting materials were:

a. Mostly new or all new

b. Dipped in	% hypochlorite.
c. Fumigated (with	

- d. Treated with fungicide: \_\_\_\_\_
- e. Re-drilled and baked.
- f. Received no special treatment.
- g. Other:\_\_\_\_\_

**5.** How many years were the nesting materials in the field before punch-out?\_\_\_\_\_

**6.** Were bee cells treated for chalkbrood before release, and if so, how?

7. How many total gallons of bees did you release last spring: \_\_\_\_\_\_gals.

It is U of I policy to prohibit and eliminate discrimination on the basis of race, color, national origin, religion, sex, sexual orientation and gender identity/expression, age, disability, or status as a Vietnam-era veteran. This policy applies to all programs, services, and facilities, and includes, but is not limited to, applications, admissions, access to programs and services, and employment.



#### HOW THE COCOONS ARE TESTED

When a sample arrives, all information about the sample including date of arrival is recorded. If the sample cannot be processed immediately, it is put into cold storage ( $7^{\circ}C = 44^{\circ}F$ ) until it can be processed.

Samples are processed on a first-come first-served basis. When ready to process, the sample is divided into 5 sub-samples of 10 grams each, laid on contact paper, and x-rayed. X-rays are read, and cells with ambiguous diagnosis are opened for confirmation. Results are recorded, tabulated, and graphed. A copy of the results is sent to you as indicated on the sample label.

Keep in mind that differences between our results and results from the Canadian Cocoon Testing Centre or any other testing facility may have a variety of causes, including differences in sampling procedures, humidity, or other storage and transportation conditions both in Canada and in the US.

Samples are accepted between January and April for emergence/sex ratio tests. The cells are first x-rayed for live count and a report is prepared as described above, . Cells that appear live in the x-ray are removed and placed in small plastic trays with individual wells for each cell. The trays are labeled with grower's name and the date that the test is begun. Trays are stored at 85-88°F until all live bees have emerged. The sex ratio of emerged bees is then determined and cells from which bees have not emerged are opened to determine at what stage the bees died. A report is sent as soon as the data are compiled. Depending on when the test is started, this could take 4 to 6 weeks.



## University of Idaho

# PARMA COCOON TESTING LABORATORY



#### SAMPLE INFORMATION

Sample ID:	
Name:	
Address:	
Phone:	
Email:	
Preferred result delivery	method:
Phone	_Fax
Email	_

#### QUESTIONNAIRE

Please fill out this questionnaire and submit it with your samples, so that the information can be included in our database.

1. The enclosed sample is from (circle the option):

CANADA:

Peace River	
Manitoba	

### Alberta Saskatchewan Other \_\_\_\_\_

Washington

#### UNITED STATES:

Idaho Oregon Nevada Montana Other

#### HOW TO SEND A SAMPLE:

Place loose cell samples in a container to prevent crushing during shipping (a clean margarine tub, coffee can, etc.). Ship your package via US mail, UPS, Federal Express, or deliver by hand to the address below. Try to avoid shipping surface mail if temperatures are expected to be especially hot or cold. Clearly mark the outside of the package "LIVE MATERIAL – AVOID EXTREME HEAT OR COLD". **SHIPMENT ADDRESS:** Parma Research and Extension Center 29603 U of I Lane Parma ID 83660.

Please fill out the enclosed questionnaire and include it and a check or money order. Filling out the questionnaire enables us to use your results to provide information for long-term monitoring efforts.

#### PRICES AND PAYMENTS:

X-ray analysis (live count, parasitism, damag	ed
cells) \$	75
Sex Ratio/Emergency Test \$	50

Make checks payable to the University of Idaho or the Parma Cocoon Testing Laboratory.

**Results:** allow about one week for live counts from loose cell samples. Allow 6 weeks for the results of sex ratio tests.

Questions: please call 208-722-6708 or email afalconbrindis@uidaho.edu **ABOUT US:** the Parma Cocoon Testing Laboratory has been serving alfalfa seed growers for over 30 years, providing accurate estimates of the proportion of live cells, chalkbrood mortality, pollen ball mortality, and parasites. We also assess emergence and sex ratio. Producers from the Pacific Northwest have been using this information to monitor and improve their bee populations. In 2024, new X-ray equipment for the Laboratory was purchased by the University of Idaho to provide a better service.

HOW TO COLLECT SAMPLES: each sample should contain at least 100 grams (3.5 oz. or about 2 cups) of loose cells. The accuracy of the sample depends on how representative the sample is of the entire population of bees. Take a handful of cells from two or three depths in each bucket, bag, or box of cells that will be included in the sample. Mix these cells well in a separate container and measure out ~100 grams (about 2 cups) into plastic self-sealing plastic bag to send to the lab. Do not mix Canadian and local bee samples.

**LABELING SAMPLES:** each sample (bag) must be clearly labeled with a name, address, phone number, and if you wish to have results faxed or emailed to you, a fax number or email address. Each sample need to have a unique identifier that allows the sample to be associated with a specific bee source (i.e. field, bee lot, etc.). For convenience, you may complete and attach the label on the brochure to your sample.