

Government of Canada

Gouvernement du Canada

HPB Method

MFHPB-20A September 1998

Carol Crawford

Supervisor, Food Laboratory
Canadian Food Inspection Agency
3155 Willingdon Green
Burnaby, British Columbia
V5G 4P2
E-mail: CrawfordC@em.agr.ca

AMENDMENT TO MFHPB-20 FOR THE ANALYSIS OF SEED USED TO MANUFACTURE SPROUTS

Analysis of Alfalfa and other Seeds

Experience in the laboratory has shown that the probability of recovery of salmonellae from dry seeds, using the standard culture method, is very low. This probability can be improved if the seeds are first ground for two minutes at high speed in a blender, **or** sprouted under sterile conditions. The following protocol for germinating alfalfa and other seeds such as radish, clover, mustard, etc., prior to analysis should be done in parallel with the analyses of non-germinated seeds. The procedure for germinating seeds is described as follows:

- 1. Aseptically weigh 125 g of seeds into a sterile container [for example, 1200 ml "Fleaker" Pyrex (Corning) or equivalent. The "Fleaker" is approximately 10 inches tall, 3.5 inches in diameter with a 2.5 inch opening] and add sterile distilled water until the level reaches approximately 1 inch above the seeds. Aseptically cover and incubate at 30° C for 3 days.
- 2. The first addition of water will be absorbed after approximately 2 hours. Add more water to restore level. Continue monitoring the water level for the remainder of the incubation period, adding more water as necessary.
- 3. After 3 days of incubation the seed coats should have split and some degree of germination should be evident. Some seeds take longer than others to fully sprout, but 3 days should be adequate for most. Aseptically weigh out 125 g of the germinated "slurry" (i.e. mixture of germinated seeds and water) and add to 1125 mL nutrient broth for overnight pre-enrichment. Proceed with MFHPB-20.

Published by: POLYSCIENCE PUBLICATIONS, P.O. Box 1606, Station St-Martin, Laval, Quebec, Canada H7V 3P9. TEL.: 1-800-840-5870. FAX: (514) 688-1930.