



Collection and identification of forest insects and fungi are essential for effective forest management. Legal, scientific and historical benefits of expert identification and archiving include records for quarantine and regulatory issues, substantiation of current outbreaks and previously undetected pests, and documentation of research results.

## SPECIMENS ACCEPTED

Please submit only the following types of specimens:

- insects, diseases and fungi from forest habitats or wood products (not from agricultural, garden or ornamental plants, or stored products);
- pests causing new or major outbreaks;
- field identifications by contractors, only by prior arrangement by Ministry regional or district staff;
- materials to document special studies, surveys, research and publications;
- unusually severe damage by known or unknown factors, for future reference.

## REPORT INFORMATION

All specimens sent to the Canadian Forest Service (CFS) must include a FS 466 form or equivalent with the following minimum data (letters correspond to those on front of this form):

- A** Geographic location of collection (reference the collection location to a recognized locality on 1:100 000 or 1:250 000 map sheet), and either UTM grid or latitude/longitude.
- B** Date of collection (year-month-day, e.g., 96 06 04).
- C** Name, affiliation, mailing address, telephone and fax numbers, and e-mail address of collector. Give name, affiliation, mailing address, telephone and fax numbers, and e-mail address of individual requesting identification, under "Remarks", if different from "C".
- D** Host/substrate information (host species, age, condition, number of hosts similarly affected, location of damage on host, or type of substrate, if not a plant).
- E** Description of area (e.g., non-forest, natural forest, plantation, bog, urban).
- F** Damage intensity and occurrence.
- G** Note unusual conditions/contributing factors, e.g., heavy frost, drought, chemical applications, proximity to roads, etc. Attach extra sheet if needed for remarks.

## SPECIMENS AND SHIPMENT

Special care must be taken to collect an adequate specimen and to prevent deterioration of material in transit. Inadequate or spoiled material cannot be processed. Ship live material by Priority Post or courier, and use crush-resistant containers (e.g., mailing tins). For labels on vials, notes and enclosures, use HB pencil or India ink to ensure permanency. Except for shipping defoliating insects, **NEVER USE PLASTIC BAGS OR WRAP**, and do not moisten specimens. For fresh disease or fleshy fungi collections, prevent mould contamination by using paper envelopes, paper wrapping and cardboard boxes for shipping.

- **Larvae of defoliators:** Ship 10-20 live larvae in a tied plastic bag with sufficient foliage for 3-5 days of feeding. Ship additional larvae in small screw-top vials containing 70-80% ethanol (preferred) or isopropyl (rubbing) alcohol. Vials must be well sealed and packaged with sufficient absorbent material and a waterproof wrap to prevent contamination or leakage if a container should break.
- **Larvae of bark beetles or woodborers:** Collect borers in small-diameter (<10 cm) stems or shoots. Ship larvae from larger material in alcohol, as above. Enclose a sample of typical damage, packaged separately.
- **Pupae and hard-bodied insects:** Ship live material in small containers with packing to protect during shipping. Place dead adult specimens between layers of tissue paper (no cotton) in a rigid container with sufficient packing to prevent any movement of material within the container.
- **Foliar diseases:** Collect 20 cm-length branches with leaves. Press flat between newsprint or, for bushy specimens, wrap in a paper bag. Include a cutting of healthy foliage (labelled) for comparison, and flowers or fruit of host plant, if identity unknown. For spring collections, include overwintered, old foliage from ground litter or on tree for possible mature fruiting bodies.
- **Stem and branch diseases:** For small-diameter material, cut a 20 cm-length of affected and adjacent healthy stem material. For larger material, cut a section of at least 10 x 10 cm from the edge of a canker. Include affected and healthy-appearing tissue. Include a section of bark with any apparent fruiting bodies.
- **Decay in wood, root disease and blowdown trees:** Determine tree species. Collect any conk or mushrooms closely associated with decay. At any fungal conks, areas of breakage or suspect decay, including decayed or diseased roots, cut a wood section of at least 15 cm x 15 cm x 15 cm that includes decayed, stained and apparently sound wood. Describe decay. For suspect root disease, select trees that were recently killed, fallen or declining (symptomatic), and avoid trees or roots that have been dead for one or more years. Sample fresh roots with disease features such as pitching, mycellia and/or stain. Package wood samples and conks separately. Label and wrap in newsprint.
- **Fleshy Fungi:** Collect several specimens, especially of varying maturity. For ground specimens, pry as much of the mushroom as possible out of the ground with a knife. For specimens on wood, also collect a specimen of any underlying wood decay, as described above. Dry all fleshy fungi before shipping. Air-dry small fragile specimens in a warm dry place, and for larger fungi, heat-dry at 50°C. Spore prints from fresh collections can be submitted with dried specimens. Package in dry material to protect in transit.

**SEND SPECIMENS WITH WHITE COPY OF THIS FORM TO:** **CANADIAN FOREST SERVICE**  
**Pacific Forestry Centre**  
**506 West Burnside Road**  
**Victoria, B.C. V8Z 1M5**  
**Attention: Insectary/Herbarium**  
**Tel.: 363-0600 Fax: 363-6005**