Screening Aid to Separate Scolytinae Bark Beetles for other Similar Appearing Bark Beetles Bobby Brown, PPQ Domestic Identifier

Scolytinae (family Curculionidae) (bark beetles): Body nearly always elongate-cylindrical (Fig. 1), antennae short, elbowed and nearly always ending in a compact club; club usually of 1-3 segments, rarely lamellate (Fig 2). Head concealed from above, narrower than pronotum, pronotum often bearing teeth. Tibia compressed, short, armed with teeth along outer margin, tarsi short. Elytral declivity often armed with teeth/denticles (Fig. 3).





Figure 1. Dorsal views of representative Scolytinae: tribe Hylesinini (left) and tribe Scolytini (right).





Figure 2. Side views of antennae, with a typical compact club (left) and lamellate (right).





01/30/2009 B. Brown Figure 3. Side view revealing different types of armature on elytral declivity (left) and abdomen (right).

Contrast these characters with other families of beetles often collected with Scolytinae that are easily mistaken for them including Bostrichidae, Anobiidae, Ciidae, Cossoninae (Curculionidae) and Aphodiinae (Scarabaeidae).

Bostrichidae (False powder-post beetles): Body elongate-cylindrical, pronotum often armed with teeth, head concealed from above, elytral declivity often armed with teeth/denticles. However, antennae not elbowed, long, and with a loose (not compact) 3-4 segmented club (Fig. 4).





Figure 4. Side view of representative Bostrichidae, with close-up of antennae (right).

Anobiidae (Death-watch beetles): Body elongate-cylindrical to rounded-compact, head often concealed from above, pronotum hood-like, rarely with teeth. Antennae long, never elbowed, filiform, serrate and sometimes with a loose club, this occasionally flabellate (Fig. 5). Legs and antennae can be tucked away in spaces in body to make beetle more compact.





Figure 5. Side views of Anobiidae. Serrate form (left) and loose, lamellate club (right).

Ciidae (Minute tree-fungus beetles): Small, body elongate cylindrical, convex, head concealed from above, antennae short with 2-3 segmented loose club, head and pronotum sometimes with horns, **though never with teeth**. **Antennae not elbowed**. (Fig. 6).





Figure 6. Dorsal (left) and front view (right) of representative Ciidae.

Cossoninae (family Curculionidae) (Wood weevils): Body form elongate-cylindrical to conspicuously flattened, many possess a snout (rostrum), short antennae, elbowed with compact club. Tibia possess a conspicuous apical spine (Fig. 7).







Figure 7. Side view of representative Cossoninae (left), top view (right) and close-up of tibia showing characteristic apical spine (bottom).

Aphodiinae (family Scarabaeidae) (Aphodiine dung beetles): Body form elongate-cylindrical, compact to rounded, antennae elbowed with a 3-segmented lamellate club. **Head conspicuous from above, antennae always with a lamellate club.** (Fig. 8)





Figure 8. Front view (left) and side view (right)of representative Aphodiinae.

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