

Japanese Beetle Larvae & Winter ID

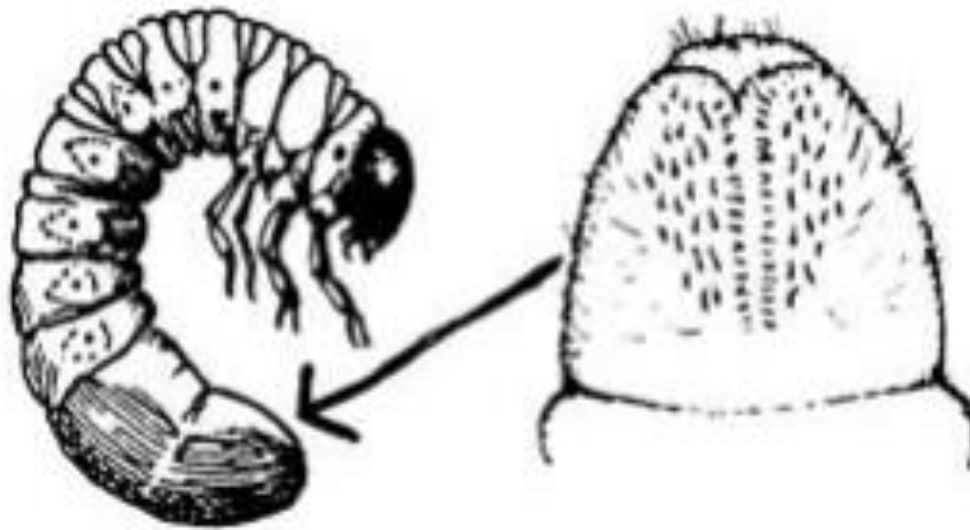
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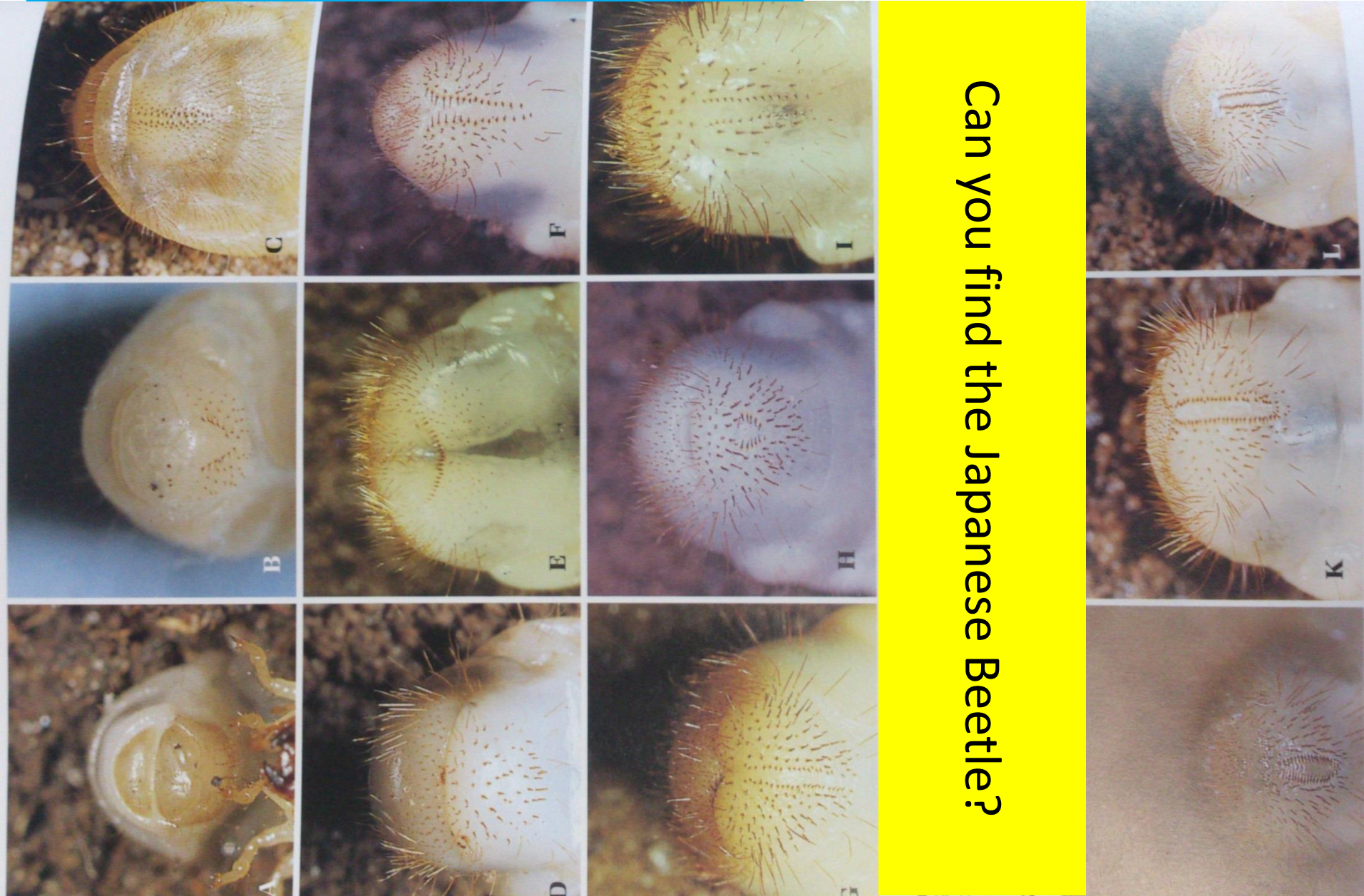
How to tell the Scarab grubs apart?

Look at larvae butts!!



<http://idl.entomology.cornell.edu/files/2013/11/European-Chafer-sz87sw.pdf>

Can you find the Japanese Beetle?



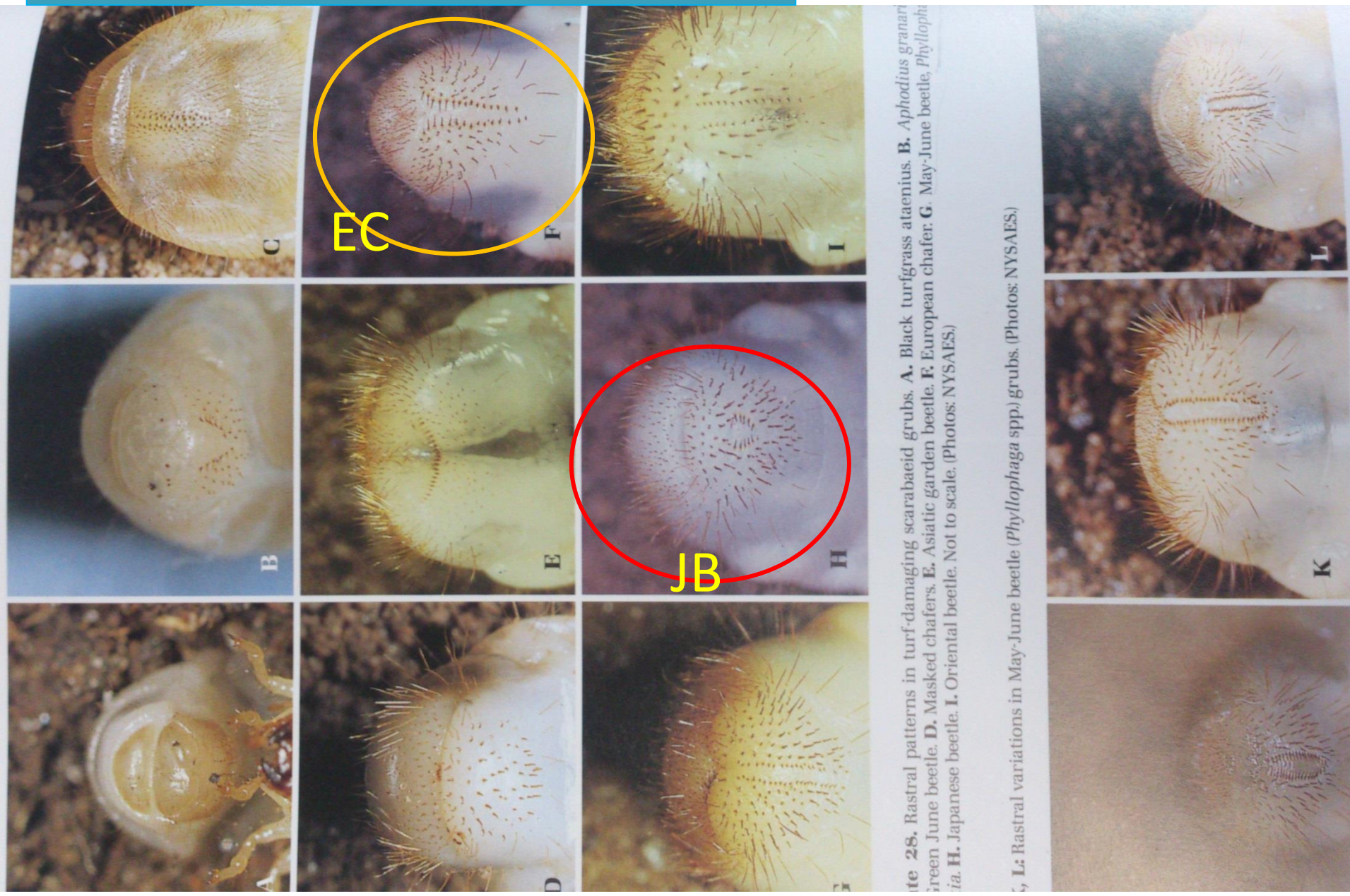


Plate 28. Rastral patterns in turf-damaging scarabaeid grubs. **A.** Black turfgrass ataenius. **B.** *Aphodius granarius*. **C.** *Phyllolophaga* sp. **D.** Masked chafer. **E.** Asiatic garden beetle. **F.** European chafer. **G.** May-June beetle, *Phyllolophaga* sp. **H.** Japanese beetle. **I.** Oriental beetle. Not to scale. (Photos: NYSAES.)

J, K, L: Rastral variations in May-June beetle (*Phyllolophaga* spp.) grubs. (Photos: NYSAES.)

Larval Hosts

- **Wide variety of plant roots**
 - ornamental, shrubs, garden crops
- **Preferred turf grasses**
 - Perennial Ryegrass *Favorite!*
 - Kentucky Bluegrass
 - Tall Fescues
 - Bentgrass

(David Cappaert, Michigan State University, Bugwood.org)



Larval Damage

- Feed on roots reducing the plants intake of water and nutrients
- Patches of brown dead grass, may feel spongy and be easily pulled away



Eggs Hatch and larvae feed in upper 5 cm until too cool, then go down

BC estimated timeline:

Go below frost line in winter and don't feed at cool temps (*what if it doesn't freeze?— just feeds slower*)

Larvae Feed in April-May, upper 5 cm

Pupate in May-June

Adults emerge late June and July (live 4-6 weeks).

Eggs laid mid July onwards

Worst larval damage: fall and spring

