



FIGURE 22.37. The apple maggot *Rhagoletis pomonella* (A) is distributed across the United States and Mexico (B). In the northeastern United States, two host races are found, which specialize on apple and hawthorn. Larvae emerge 3–4 weeks earlier from apple than from hawthorn (C), and so experience a warmer prewinter period and must diapause over winter as pupae for longer.

22.37A, photo courtesy of Andrew Forbes, U.C. Davis; 22.37B, redrawn from Feder J.L. et al., *Proc. Natl. Acad. Sci.* **100**: 10314–10319, © 2003 National Academy of Sciences, U.S.A.; 22.37C, redrawn from Filchak K.E. et al., *Nature* **407**: 739–742, © 2000 Macmillan, www.nature.com.