Annotated bibliography: Role of phenology in plant–animal interactions

Jacqueline Levy

Arzaluz, I.O.and R.W. Jones. 2001. Ecology and phenology of the boll weevil (Coleoptera: Curculionidae) on an unusual wild host, *Hibiscus pernambucensis*, in southeastern Mexico. Ecology and Behavior 94: 1405-1412. (A good example of how host plant phenology can influence insect phenology.)

Connett, J.F., L.M. Wilson, J.P. McCaffrey, and B.L. Harmon. 2001 . Phenological synchrony of *Eustenopus villosus* (Coleoptera: Curculionidae) with *Centaurea solstitialis* in Idaho. Biological Control 30: 439-442. (Example of the importance of phenology in choosing a biological control agent.)

Ishihara, M. 1998. Geographical variation in insect developmental period: effect of host plant phenology on the life cycle of the bruchid seed feeder *Kytrohinus sharpianus*. Entomolgia experimentalis et applicata 87: 311-319 (An example of the change in insect development rates in response to the development of its host.)

John, R.E. 2001. Mechanisms for locating resources in space and time: impact on the abundance of insect herbivores. Austral Ecology 26: 518-524. (Great overview paper on the factors influencing the phenologies and the mechanisms insect use to respond to environmental cues.)

Law, R., J.L. Bronstein, and R. Ferriere. 2001. On mutualist and exploiters: plant-insect coevolution in pollinating seed-parasite systems. Journal of Theoretical Biology 212: 373-389 (An excellent examination of how these systems evolve and the importance of phenology. The include a lot of models and mathematics, so it is not an easy read.)

Martel, J. and A. Kause. 2002 The Phenological window of opportunity for early-season

birch sawflies. Ecological Entomology 27: 302-307. (This paper tests the 'phenological window hypothesis'. It is a straightforward study.)

Mussey, G.J. and D.A. Potter. 1997. Phenological correlations between flowering plants and activity of urban landscape pests in Kentucky. Horticulture Enotmology 90: 1615-1627. (This study shows how plant phenology is a better predictor of insect activity than calendar date, which is useful to pest management. I found this one interesting.)

Pilson, D. 2000. Herbivory and natural selection on flowering phenology in wild sunflower, *Helianthus annuus.* Oecologia 122: 72-82 (This examines how insect activity impacts plant phenology.)

Schiller, J.R., P.H. Zedler, and C.H. Black. 2000. The effect of density-dependent insect visits, flowering phenology, and plant size on seed set of the endangered vernal pool plant *Pogogyne abramsii* (Lamiaceae) in natural compared to created vernal pools. Wetlands 20: 386-396. (This study does not focus on phenology.)