Quantifying host-specific time spans of development for internally feeding insects.

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This work addresses the need in various fields of entomology (e.g., stored products, quarantine, forensic) to establish the probability that a recently emerged adult insect was in a particular life stage within a given host at any time before observation. A statistical method was developed in the context of quantifying host-specific life stages present before, during, and after a disinfestation treatment following a determinate oviposition period. Mathematical framework is presented for reporting "time spans" of insect development with the respective probability of each life stage tracked chronologically and as a function of the treatment and host.

References.

Bellamy, D.E.; Walse, S.S. 2013. Quantifying host-specific time spans of development for internally feeding insects: life stage distributions versus age**.** *J. Econ. Entomol.* in press