

Figure S1. Life cycle forms of *Melaphis asafitchi*. **A.** Aggregation of sexuparae. Several sexuals also present; Gatineau Park, Québec, 21 May 2014. **B.** Aggregation of sexuales; Chaffeys Lock, Ontario, 20 May 2014. **C.** Male and sexual female in copula. **D–E.** Sexual female with first instar fundatrix, Chaffeys Lock, Ontario, 4 June 2014. **D.** Final phase of deposition of fundatrix contained within ovarian membrane. **E.** Fundatrix after eclosion; remains of ovarian membrane under left metatibia. **F–G, K.** Mallorytown, Ontario, 16 June 2014. **F.** Group of first instar fundatrices on abaxial surface of leaflets waiting for leaflets to unfold. **G.** First instar fundatrix in early stage of gall, observed through gall aperture on adaxial surface of leaflet, before closure. **H–J.** Saint-Michel-de Bellechasse, Québec, 28 July 2014. **H.** Cross section of young gall containing adult fundatrix (wax covered individual at apex of gall) with mature and immature fundatrigeniae. **I.** Projections of gall on adaxial surface of leaflet. **J.** Cross section of neck of gall showing closure of original opening (line represents plane of leaf blade). **K.** Apterous adults and larvae on moss.

