

Development and reproduction of two color forms of english grain aphid

(Homoptera: Aphididae)

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The life cycle of apterous and alate viviparae of pink and green color forms of the English grain aphid, *Sitobion avenae* (F.), were compared at $20 \pm 1^\circ\text{C}$ and a photoperiod of 14:10 (L:D) h, using individually caged aphids that were examined daily on 'Clintland 64' oat, *Avena sativa* L. Two studies were conducted, using 22 replicates with apterous and alate *S. avenae*, and 132 replicates with only apterous forms. Alate aphids had a greater prereproductive period than apterous aphids, probably in part because their metabolism was directed towards wing development before reproduction. Apterous pink aphids had a shorter reproductive period than all other forms. This, together with their higher intrinsic rate of increase ($r(\text{in})$), may represent an advantage over green aphids for colony growth, although this advantage may be reduced because alate pink aphids had the smallest $r(\text{in})$ of the aphid forms. Alate aphids tended to have a longer postreproductive period. The longevity of apterous pink aph