

Investigations were conducted in the greenhouse to evaluate the biological performance of *Aphis fabae* Scopoli when bred on two varieties of the common bean, *Phaseolus vulgaris* L. Mean developmental period of the aphid was 7.8 days at 26.5°C (range 15.0–32.5°C) on the bean varieties Mwezi Moja (GLP.10) and Red Haricot (GLP.3). The reproductive life of the aphid averaged 15.3 days (range 11–17 days) during which each mother aphid produced on average 55.2 and 56.2 nymphs on the two bean varieties, respectively. Nymphs (66.2%) were born during the daytime (0600–1800 hr), whereas only 33.8% of the nymphs were produced during the night (1800–0600 hr). There were two peaks of diurnal nymphal production, and more nymphs were born during the morning peak (0600–0800 hr) than during the mid-afternoon peak (1400–1600 hr). A very high rate of *A. fabae* population increase was observed.