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Long-time behavior of continuous time models in genetic algebras. (English summary)
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In a genetic algebra the differential equation $\dot{x} = x^2 - x$ with $x(0) = y$ describes the change in the composition of a population with continuously overlapping generations. In this paper an expression is found under certain assumptions for the limit composition of such a population when $t \to \infty$. The expression is derived considering the Taylor expansion $\sum g_k(y)t^k$ of the solution of the equation $\dot{x} = x^2$ with $x(0) = y$. It is shown that the coefficients $g_k(y)$ in this expansion satisfy a particular baric identity, and this is utilized to construct an expression for the limit term $g_k(y)$ when $k \to \infty$. This expression involves coefficients in the baric identity and terms $g_k(y)$ of low order. The expression coincides with the limit of the solution to the original differential equation when $t \to \infty$. *Ivar Heuch*

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