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Generalization of an integral equation related to some epidemic models

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ABSTRACT.
In the paper *An integral equation via weakly Picard operators* (to appear in Fixed Point Theory, **10** (2010)), the author I. M. Olaru has studied the following integral equation

$$x(t) = [g_1(t) + \int_a^t K(t,s,x(s))ds] \cdot [g_2(t) + \int_a^t K_2(t,s,x(s))ds],\ t \in [a,b].$$

In this paper, by using fixed point results for the operators defined on cartesian product, the following integral equation

$$x(t) = \prod_{i=1}^{m} A_i(x)(t), t \in [a,b],$$

where $A_i : C[a,b] \to C[a,b]$.

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