The iterates of positive linear operators with the set of constant functions as the fixed point set

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ABSTRACT.

Let $\Omega \subset \mathbb{R}^p$, $p \in \mathbb{N}^*$ be a nonempty subset and $B(\Omega)$ be the Banach lattice of all bounded real functions on Ω, equipped with *sup norm*. Let $X \subset B(\Omega)$ be a linear sublattice of $B(\Omega)$ and $A\colon X \to X$ be a positive linear operator with constant functions as the fixed point set. In this paper, using the weakly Picard operators techniques, we study the iterates of the operator A. Some relevant examples are also given.

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