## **Semiprimary** *n***-semigroups**

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## Abstract.

The study of commutative primary semigroups was initiated by M. Satyanarayana [?], continued by H. Lal [?] on semiprimary semigroup and generalized in the noncommutative case by S. Bogdanović [?], [?]. The purpose of this paper is to give a generalization of the semiprimary semigroups by replacing the binary operation by an n-ary operation,  $n \in \mathbb{N}$ , n > 2. Most of the results of this paper are obtained by using the concept of radical of an ideal in an n-semigroup.

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