

Heuristic optimization algorithms which are inspired by nature have become very popular for solving real world problems recently. The use of these algorithms increases day by day in the literature because of their flexible structures and non-containing confusing mathematical terms. One of these algorithms is Bat Algorithm (BA). BA is a heuristic algorithm based on echolocation characteristic of bats and developed by the mimics of bats' foraging behaviour. In this study exploration mechanism of the algorithm is improved by modifying the equation of pulse emission rate and loudness of bats. The performance of Modified Bat Algorithm (MBA) is verified by 15 benchmark functions and the results were exhibited as comparative. The results of MBA are superior in terms of solution quality on optimization problems compared to BA.