ABSTRACT

From an analysis of the existing methods of approximated resolution of problem the TSP, Travelling Salesman Problem, it searches for some behaviour of the nature which can be simulated by any of these techniques. Furthermore, the existing methods pretending to be the source are described and analysed to build up the new algorithm bio-heuristic. On the other hand, it looks different behaviours from the world animal to find a situation optimized.

From the resemblance of the searching of the nectar of a cluster of bees it has set out a new bio-heuristic algorithm. This proposal develops this resemblance with the aid of the genetic algorithms.

This situation is implemented in a programming language, C++, and a feasible program as bio-heuristic algorithm is generated.

With the software running, the sensitivity of the parameters is analyzed and their values by the calculations with the different problems from well-known solution are sharpened with which the answer of the prototype of programmed algorithm is evaluated.