

ABSTRACT

Genetic algorithm is considered to have optimal results for many problems, it has been proven that genetic algorithms can produce a set of optimal solutions that are very useful with many objectives, one of which is to complete the calculation of estimated eggtray production costs at PT Sinar Era Box Gresik.

From the results of experiments using genetic algorithms to calculate production costs at PT Sinar Era Box Gresik with several iterations, the smallest fitness value was obtained in the fourth experiment with 100 iterations, ie 7154000 in the 68th iteration with the details of dregs = Rp. 600000, spindle = Rp. 1408000, carton = Rp. 513000, glue = Rp. 305500, wood = Rp. 283500, plastic = Rp. 1000000, employee wages = Rp. 2688000, diesel = Rp. 11500, rope = Rp. 200000, wages for wholesale employees = Rp. 233400.

Keywords: genetic algorithm, production cost, estimation, eegtray