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In modern agricultural engineering there is a tendency to replace field tests of machines with simulation modeling of their work processes on a computer. The adequacy of simulation models is increased by using probabilistic characteristics of random parameters obtained from the results of simple experiments. More complex situations are modeled by the program.

The purpose of the presented research is to simulate the distribution of water by sprinklers. For example, an analysis of the work of twelve sprinklers was carried out. The presented computational experiment was performed to optimize the positioning of the apparatuses according to the criteria of uniformity of irrigation and according to the coefficient of completeness of water accounting that falls on the test site.

#### REFERENCES

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