

APPROPRIATE OPERATIONAL CONDITIONS ENABLE UNIFORM BOOM SPRAYER DISTRIBUTION?

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Abstract: The pesticides application is one way to control the crop diseases, pests and weeds. The uniformity of distribution is a goal in pesticide applications [1]. The aim of this study was evaluating the horizontal distribution from an application with a boom sprayer, under appropriate operational conditions. 396 water sensitive papers were distributed at a 1 x 1 m distance in a flat and regular surface. Over the surface it was sprayed water with a boom sprayer. Each water sensitive papers image were digitalized by a scanner and its coverage was evaluated by the Conta-gotas[®] [2] software. The data were integrated and presented in a graphic with five tracks of coverage (0-20, 20-40, 40-60, 60-80 and 80-100%). Most of the area (87.09%) had coverage ranging from 40 to 80%. However, the coverage ranged from up 100% in a significant area. The results showed that boom sprayer applications may not be uniform, even under appropriated conditions.

References:

- [1] MATTHEWS, G. A. 2002. The Application of Chemicals for Plant Disease Control. In: WALLER, J.M.; LENNÉ, J.M.; WALLER, S.J. *Plant pathologist's pocketbook*. Pp.345-53. CAB. London
- [2] CANTERI, M. G.; FÜRSTENBERGER, A. L. F.; GARCIA, L. C.; JUSTINO, A. 2001. Conta-gotas: sistema para análise de eficiência de pulverização. In: CONGRESSO PAULISTA DE FITOPATOLOGIA, Piracicaba, SP. Summa Phytopathologica. Jaboticabal: Grupo Paulista de Fitopatologia, 27: 136.