

KINETICS OF SURFACE TENSION AND CONTACT ANGLE OF *METARHIZIUM ANISOPLIAE* AND *ASPERGILLUS* SP. SUSPENSIONS

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Abstract An important aspect to consider in biological pest control is the formulation of biopesticides, since it may interfere with the effectiveness of the control target. The aim of this study was to evaluate the kinetics of surface tension and contact angle of droplets formed in suspensions of *Metarhizium anisopliae* and *Aspergillus* sp. The treatments for *Aspergillus* sp. were: T1 - ultra pure water (UPW); T2 - Solution 0.1% Tween 80 (TW), T3 - suspension 2×10^8 conidia/ml of JAB 42 isolate of *Aspergillus* sp. (Asp), T4 - 2×10^7 con./ml Asp; T5 - 3×10^6 con./ml Asp and for *Metarhizium anisopliae*: T1 - UPW; T2 – TW, T3 – suspension 2×10^8 conidia/ml of JAB 68 *Metarhizium anisopliae* isolate (Ma), T4 – 2×10^7 con./ml of Ma, T5 – 3×10^6 con./ml of Ma. It was done an image analysis with a tensiometer and automatic software to obtain the kinetics of surface tension and contact angle of the formulations on wings of cockroaches. Data was analyzed using Scott-Knott test ($p \leq 0.05$). Conidial suspension of Asp-T3 had higher surface tension at 90s and 180s, indicating less spread when compared with other suspensions. Suspension of Ma-T3 treatment presented higher surface tension than suspension of T4 and T5 treatments at 5 seconds, which reveals a smaller scattering of the liquid. There was no difference between TW with conidial suspension of Ma in contact angle formed with the surface, which shows that the form and amount of inoculum does not interfere with the spreading of suspension.