

THE CARCINOGENICITY OF ABAMECTIN 1-B FROM FORMATION HEAT

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ABSTRACT: Since the 1980s, Brazil has proved to be a great power in agriculture, but this robustness was accompanied by the intensive use of agricultural pesticides. This scenario led the country in 2008 to the uncomfortable situation of the world's largest consumer of agrochemicals. In this context, the National Agency of Sanitary Surveillance (ANVISA) performs the official function of regulating agent of these products, applying evaluation and norms on its use and in relation to the evaluation, it currently has in its reassessment product database Abamectin 1-b , a powerful insecticide and acaricide. In this sense, the present work consisted of an evaluation of the carcinogenicity of this compound, through the application of the computational model of the carcinogenicity, where we made use of DFT to obtain the heat value of the molecule formation. According to the model, this variable is directly proportional to the carcinogenic induction of the compound, and in our results, Abamectin 1-b exhibited a low value that although it does not allow to be conclusive on the carcinogenicity, the information subsidizes future analyzes on the compound.

Key words: Carcinogenic, Anvisa, Agrototoxic