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Study on Inverse Laplace Transform of NMR relaxation signal of Sticky rice.

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In this study, the composition of sticky rice was studied using NMR relaxometry. Because the rice seeds have several elements, the NMR signal is multiexponential decay. However, its components that yield NMR signals can be separated by using Inverse Laplace Transform method. This method is data analyze by from least squares algorithms. The Downhill Simplex method was used to find the variable values faster. Numerical results of signals analysis are comprised of discrete spectrum of T_1 and T_2. These spectrums of sticky rice samples are shown separation of the peak composition. In this work the resulting spectrum has two peaks, each peak has a value of T_2 is 0.31 and 1.29 ms, respectively.

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