



HPLC-MS Analysis of Phenolic Compounds in Defatted Flour of *Sesamum indicum* L. Accessions+

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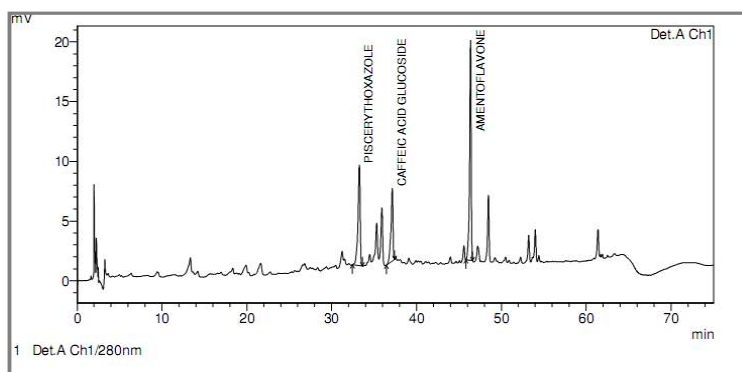
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ABSTRACT

To characterize the phenolic compounds in thirteen accessions of *Sesamum indicum* L. GT-2, HIMA, RT-46, Nirmala, RT-54, JLT-7, MT-75, RT-46, Gouri, YLM-66, YLM-17, YLM-11 and Madhavi. There was significant variation among the thirteen accessions. Based on HPLC-MS studies along with authentic standards three phenolics were identified as Piscerythoxazole, Caffeic acid glucoside and Amentoflavone. The Piscerythoxazole was reported to be high in all twelve accessions except in RT-54. Amentoflavone was also reported in all thirteen accessions and highest in Nirmala, Madhavi, Gouri and YLM-17. Caffeic acid glucoside was found in twelve accessions and it was absent in YLM-66. The Significant variation in phenolic compounds among the thirteen *Sesamum indicum* L accessions include in this study will help in screening of accessions for enhanced secondary metabolite production through in-vitro cultures.

Graphical Abstract



Chromatogram of the methanolic crude extract of defatted sesame flour.

Keywords: *Sesamum indicum* L, Piscerythoxazole, Caffeic acid glucoside, Amentoflavone, HPLC-MS.