Evaluation of mono-saccharides of Zedu gum

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Abstract: Gum Zedu (Cherry gum) extracted from apricot with a scientific name \textit{Armeniaca vulgaris} is native to China and is grown in various parts of Iran as well. Gum Zedu in traditional medicine to stimulate appetite, kidney stones and expectorant in the industry as a suspending agent and emulsifier is used. In this study, we identified the mono-saccharide of gum zedu(cherry gum) extracted from the apricot with a scientific name \textit{Armeniaca vulgaris} is native to China and is grown in various parts of Iran as well. For this purpose, samples of gum Bastam city apricot trees were collected in 1389 and was dissolved in water and resulting solution was purified and acid hydrolysis then combination of these sugars by TMS derivatization and gas-liquid chromatography and comparison with standard sugars were identified. According to the survey results gum is completely dissolved in water and the sugars in the gum are: Arabinose 21/63%, Fucose 2/02%, Xylose 3/32%, Galactose 14/92%, Glucose 24/22% and other sugars 33/89%. Fructose and Rhamnose were not in this gum. With respect to other similar works that has done in other gum, this gum has also may contain glucuronic acid. According to the results of this research some features of Zedu gum and other herbal gums are the same. Almost all the herbal gums containing Arabinose, Xylose, Galactose, Glucuronic acid with different percentages.

Keyword: Zedu Gum, Mono-saccharides, acidic hydrolysis, \textit{Armeniaca vulgaris}, arabinose, galactose, glucose