

## عنوان مقاله:

Investigation of some functional properties of Quince seed mucilage extracted by ultrasound

## محل انتشار:

اولین کنفرانس بین المللی صمغ های بومی و کاربرد آن در صنعت غذا (سال: 1393)

تعداد صفحات اصل مقاله: 3

## نویسندگان:

Atefeh Farahmand - M.S Student of food science and technology, Ferdowsi University of Mashhad, Iran

Mehdi Varidi - Assistant Professor, Department of Food Science and Technology, Ferdowsi University of Mashhad, Iran

Arash Koocheki - Associate Professor, Department of Food Science and Technology, Ferdowsi University of Mashhad, Iran

## خلاصه مقاله:

The application of power ultrasound offers the opportunity to modify and improve some technologically important compounds which are used in food products. One of them is Quince seed mucilage. After determination of optimum conditions in conventional extraction, mucilaginous hydrocolloids samples were isolated using ultrasonic probe (24 KHz) under different conditions (i.e., time 5, 15, 30 min and amplitude 20, 60, 100%) in constant optimum temperature (47°C) and their functional and rheological properties were studied. The results have shown that extraction yield was increased with increasing sonication time and amplitude. The increase in foaming stability was associated with viscosity reduction. All parameters had significant effects on the lightness of mucilage powder and maximum L\* value was shown in 20% intensity and 5 min time. A significant decrease in consistency coefficient (k) has also been observed. Emulsion heat stability and emulsion stability were decreased with increasing time and intensity but in all samples, emulsion stability was higher. WAC was decreased by sonication, which could be attributed to the distortion of polysaccharide structure.

## کلمات کلیدی:

Functional properties, Quince seed mucilage, Ultrasound- assisted extraction

## لینک ثابت مقاله در پایگاه سیویلیکا:

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