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IUFoST *International Union
of Food Science and
Technology*

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*European Federation
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THE INFLUENCE OF DIET ON THE CONTENT OF ROUTINE PLANT IN BUCKWHEAT LEAVES

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Examined the content of the methanol extract routines MeOH dried buckwheat leaves that were collected from several sites in the full flowering of plants. Extracts were prepared by heating with return cooler with the addition of methanol p.a. After extraction was performed filtration of extracts, prepared in such extracts was determined by the content of routine HPLC analysis method kvantotativne using external standards (rutin) over the calibration curve. Fagopyri herba drug is described in European Pharmacopoeia VI as well as routine analytical procedure content (Ph.Eur.6.0).

Routine biennial examination content in leaves of buckwheat and collection of samples included four sites - Valjevo, Pancevo, Kucevo (Velika Plana) and Surduk. For the purposes of this study was selected local variety of buckwheat dove was grown in the system optimal mineral nutrition of plants with the addition of NPK nutrients hydrogel and zeolite to bind water in the surface layers of soil and prevent its evaporation loss. Routine analysis of the contents in the leaves were done using liquid chromatography on HPLC apparatus Hewlwt Packard, HP 1090 LC with Dioden-Array detector. The results showed that the diet of plants and significantly contributed to the site of synthesis and accumulation in leaves of routine. Average content in leaves of routines was 3.23%. In the variant without the use of NPK mineral fertilizers in both years this value was significantly lower than in the variants of the diet of plants and amounted to 2.87%. Mineral nutrition of plants routines content in leaves increased significantly (3.06%). Funds for water binding hydrogel and zeolite significantly affect the synthesis routine. Increasing the amount of routine in these variants compared to compared to the variant with NPK mineral nutrients was about 10%. The content is varied routines and locations. At least it was routine in the locality lisotvima buckwheat Surduk 2.78%, and most of the experiments in Kucevo and Petrovac, 3.71%. Isolated extraction procedure, routine use in the pharmaceutical and food industries.

Keywords: buckwheat leaves, rutin, HPLC, Food plant, the site.