

обволакивающим, противовоспалительным действием, пустырник сердечный (лат. *Leonurus cardiaca*), крушина ольховид-ная (лат. *Frángula álnus*), липа сердцевидная (лат. *Tília cordáta*) - обладает противовоспалительным, жаропонижающим, седативным и другими свойствами, вахта трехлистная (*Menyanthes trifoliáta*), зверобой продырявленный (лат. *Нурéricum perforátum*), душица обыкновенная (лат. *Oríganum vulgáre*). Душица в зависимости от способа получения экстракта обладает антимикробным, седативным, гомеостатическим, противовоспалительное действием, усиливает перистальтику и тонус кишечника, повышает секрецию желудочного сока, оказывает тонизирующее действие на сокращение гладкой мускулатуры матки.

Многие дикоросы, произрастающие в Тюменской области в настоящее время, в основном используются только в медицине, в то время как они могут быть успешно применены в качестве функциональных ингредиентов при производстве продуктов функционального назначения. Использование местной сырьевой базы для производства биологически активных добавок является доступным и экономически выгодным условием развития пищевой промышленности.

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BIODEGRADABLE PLASTICS (BIOPLASTICS): PROSPECTS AND APPLICATION

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Scientists all over the world are researching in this area to help solve the problems of environmental pollution caused by traditional plastics. Numerous studies on microorganisms and some plant materials used in producing biodegradable plastics will be very useful to the environment in future.

Amongst all materials, including metals, ceramics and composites, polymers have proven to be of significant value our industrial world, economically and socially. Polymers like plastics and rubbers are widely used all over the world in different spheres of life due to their attractive properties such as; low density, ability to resist corrosion, and excellent resistant to electricity conduction. However, the continuous use of these materials without a proper management of their wastes coupled with their low

biodegradability has resulted in a huge environmental problem globally, as they accumulate both on land and in the ocean. Therefore, in the quest to solve this ecological crisis, there has been an immense interest and investments into biodegradable plastics otherwise known as bioplastics. Hence, searching for an innovative biodegradable plastic is of a great importance. Considering these, microbial polyesters known as polyhydroxyalkanoates (PHAs) has emerged as one of the promising sources of bioplastics [1]. In addition, some plant materials like vegetable fats and oils, corn oil, orange peels, and many others have been used in manufacturing bioplastics. Life cycle assessment indicates that PHA is more beneficial than petroleum-based plastics. Several microorganisms like *Halomonas campisalis*, *Burkholderia xenovorans* LB400, and others have been identified to synthesis PHAs. For cost effective production of PHA, agro-food wastes like fruit peels, bagasse and deoiled cakes has been explored as source of carbon. This paper is therefore aimed at reviewing the prospects and application of biodegradable plastics.

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OPPORTUNITIES AND ADVANTAGES OF A PORTABLE RADIOMETRIC SYSTEM IN OPHTHALMOLOGY

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The paper describes the main advantages of the developed system and the most useful abilities of its application. Experimental tests with using of the phantom model made it possible to evaluate its applicability for the implementation of specific techniques and evaluate their efficiency.

The prototype of the portable radiometric system (PRS) was developed in the in the laboratory of radionuclide diagnostics of Ural Federal University [1]. The PRS consists of four small body-attachable scintillation detectors. The main advantage of the system is the capability to perform dynamical scintigraphy assessments in several distant points of the body, while each detector could be positioned in an arbitrary point at arbitrary projection.

One of the most perspective applications of the PRS is dynamical scintigraphy studies of lacrimal apparatus. One of the advantages of this type of research is the high efficiency of radiation detection in comparison with SPECT. Such an approach can