Jerusalem artichoke (Helianthus tuberosus), a medicinal salt-resistant plant has high adaptability and multiple-use values

Ma, Xiao Yong; Zhang, Li Hua; Shao, Hong Bo; Xu, Gang; Ni, Fu Tai; Brestic, M.

2011-04-18

JOURNAL OF MEDICINAL PLANTS RESEARCH

ISSN 1996-0875

Jerusalem artichoke (Helianthus tuberosus) is an Angiosperm plant species of the Compositae family, and a C-3 warm-season species of sunflower. This herbaceous plant shows significant ecological and commercial importance for its strong stress tolerance, very high yield potential and more application areas such as chemicals, pharmaceuticals and industrial applications. The morphologic, bio-ecological characteristics, the utilization and applied values of H. tuberosus are introduced in the present review and put forward the problems that need to be studied further in the future for its wider application. Many wild plants besides H. tuberosus can be planted as medicinal plants in saline-alkali soil for their remarkable saline-alkali tolerance as well as economic values.


Shao, HB, Chinese Acad Sci, Yantai Inst Coastal Zone Res, CAS Key Laboratory Coastal Environm Proc, Shandong Key Lab Coastal Environm Proc, Yantai 264003, Shandong, Peoples R China. shaohongbochu@126.com ; fzhang@sxu.edu.cn ; nifutai@163.com

Pharmacology & Pharmacy

Chinese Academy of Sciences (CAS)[KZCX2-YW-JC203, 2009Y2B211]; National Natural Science Foundation of China[41001137]; Science and Technology Development Plan of Shandong Province[2010GSF10208]; CAS/SAFEA International Partnership Program for Creative Research Teams

SCI

WOS

Pharmacology & Pharmacy

WOS:000294603100001

http://ir.yic.ac.cn/handle/133337/5093
Ma, Xiao Yong, Zhang, Li Hua, Shao, Hong Bo, et al. Jerusalem artichoke (Helianthus tuberosus), a medicinal salt-resistant plant has high adaptability and multiple-use values. JOURNAL OF MEDICINAL PLANTS RESEARCH, 2011, 5(8): 1272-1279.

APA
Ma, Xiao Yong, Zhang, Li Hua, Shao, Hong Bo, Xu, Gang, Zhang, Feng, ... & Brestic, M. (2011). Jerusalem artichoke (Helianthus tuberosus), a medicinal salt-resistant plant has high adaptability and multiple-use values. JOURNAL OF MEDICINAL PLANTS RESEARCH, 5(8), 1272-1279.

MLA

Jerusalem artichoke (Helianthus tuberosus), a medicinal salt-resistant plant has high adaptability and multiple-use values.pdf
Adobe PDF
Helianthus tuberosus var. tuberosus[21]. Taxonomic classification: Common names Plants have been used as drugs by humans since. thousands of years ago. As a result of accumulated experience from the past generations, today, all the world's cultures have an extensive knowledge of herbal medicine. Plants are a valuable source of a. The Jerusalem artichoke (Helianthus tuberosus L.) is used in folk medicine since ancient times. The tubers of this plant contain to 22% inulin, that is insulin substance of plant origin. Inulin is the unique natural polysakharid, it consists 95% of fructose. In a stomach inulin is not assimilated, the part of it dissociates to short fructose chainlets and separate molecules of fructose, which get to the bloodstream. It is very important for people, who are ill with the diabetes mellitus, because fructose is being assimilated without insulin participation (unlike glucose). That's why such peopl