

不同起垄覆膜栽培方式 黄芪中 10 种主要成分含量差异^{*}

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摘要:目的 测定不同起垄覆膜栽培条件下黄芪中 10 个主要成分的含量。方法 采用 HPLC - UV、HPLC - ELSD 法测定黄芪中 4 种黄酮类成分与 6 种皂苷类成分的含量, 评价不同起垄覆膜栽培条件下, 黄芪药材主要成分含量的差异。结果 当栽培方式为不起垄覆膜(即当地传统的平地开沟覆膜移栽)时, 黄芪中主要成分的含量达到最大值。结论 通过考察不同起垄覆膜栽培方式下, 黄芪中主要成分的含量, 为以后黄芪药材的栽培种植研究提供依据。

关键词:黄芪;起垄覆膜;含量测定;黄酮类成分;皂苷类成分。

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Content Difference of 10 Main Components in Astragalus Membranaceus under Different Ridging and Film Mulching Cultivation Methods

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Abstract: **Objective** To determine the content of 10 main components in astragalus membranaceus under different ridging and film mulching cultivation conditions. **Methods** The contents of four flavonoids and six saponins in astragalus membranaceus were determined by HPLC - UV and HPLC - ELSD, and the differences of the main components in astragalus membranaceus under different ridging and mulching cultivation conditions were evaluated. **Results** When the cultivation method was non - ridge mulching (i. e. traditional flat furrow mulching transplanting), the content of the main components in astragalus membranaceus reached the maximum. **Conclusion** By investigating the content of main components in astragalus membranaceus under different ridging and mulching cultivation methods, it provides a basis for the cultivation of astragalus membranaceus.

Keywords: astragalus membranaceus; ridging and mulching; content determination; flavonoids; saponins

黄芪为豆科(Leguminosae sp)黄耆属(Astragalus Linn)植物蒙古黄芪 Astragalus membranaceus (Fisch.) Bge. var. mongholicus (Bge.) Hsiao 或膜荚黄芪 Astragalus membranaceus (Fisch.) 的干燥根^[1], 又名棉芪。主要分布于内蒙古、甘肃、山西、

陕西等地。现代研究表明具有抗肿瘤^[2]、保护心肌缺血^[3]、保护心血管内皮细胞^[4]、免疫调节^[5]、抗衰老^[6]、抗氧化^[7]等作用。随着现代研究的不断深入, 人们对于黄芪的需求量也在逐年增加, 但是由于大规模采挖导致野生黄芪的资源也在逐年

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