

不同生态条件下老山芹主要生育期和营养成分的比较分析

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摘要: 以黑龙江省 6 个积温带不同生态条件下的老山芹为试验材料, 通过对其形态指标及主要生育期的实地调查比较和营养成分的测定分析, 研究不同生态条件对老山芹生长发育及营养成分的影响, 为生产老山芹时生态条件的选择提供依据。结果表明, 随着生态条件中积温、年平均气温等的降低, 老山芹的各物候期均延迟, 生育期缩短, 东宁生态条件下老山芹的生育期为 114 d, 比呼源多 20 d, 生育期差异达显著水平; 其叶片中的多糖、可溶性糖、脂肪含量增加, 可溶性蛋白含量减少。东宁的生态条件有利于老山芹特殊成分黄酮和皂苷的积累, 而海林的生态条件有利于老山芹特殊成分香豆素化合物的积累。

关键词: 老山芹; 生态条件; 物候期; 营养成分

Comparative analysis to different ecological conditions on main growth period and nutritional components of *Heracleum dissectum*

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Abstract: Based on the 6 accumulated temperature zone of Heilongjiang in different ecological conditions represent natural habitats under the mountain *Heracleum dissectum* as the experimental materials, based on the determination and analysis of its character index and the main growth period of the field investigation and comparison of nutritional components, of different ecological conditions on the growth and nutrient content of *Heracleum dissectum* effect, provide the basis for the selection of ecological conditions according to different production purposes. The results showed that with the decrease of temperature, the annual average temperature in ecological conditions and other factors, the phenophase and growth period of *Heracleum dissectum* were shorten. The growth period of *Heracleum dissectum* in Dongning ecological condition was 114 d, which was 20 d longer than that of Huyuan, the difference of the growth period was significant. The content of polysaccharides, soluble sugar and fat in leaves were increased, and the content of soluble protein was decreased. The ecological conditions of Dongning were beneficial to the accumulation of flavonoids and saponins in *Heracleum dissectum*, and the accumulation of coumarin compounds in *Heracleum dissectum* is favorable to the ecological conditions of Hailin.

Key word: *Heracleum dissectum*; Ecological condition; Phenolog

老山芹(*Heracleum dissectum* Ledeb.), 学名东北牛防风, 为伞形科独活属多年生草本植物, 多分布于海拔在 500~1 000 m 的山地混杂林缘、灌木丛中和山地溪流旁^[1]。老山芹的食用方式多样, 可通

过盐渍贮存作为咸菜食用, 亦可凉拌或选鲜嫩叶柄炖食, 味道鲜美具有特殊风味^[2]; 老山芹作为一种药食兼用山野菜, 对高血糖、高血脂、高血压的康复具有显著的食疗效果^[3]。前人研究主要集中于老山芹

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