

栽培技术

气象因子与烟叶化学成分及香吃味间的典型相关分析

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收稿日期 2005-6-2 修回日期 网络版发布日期 2006-8-16 接受日期

摘要 对云南代表烟区的气象因子与烟叶化学成分及香吃味间的典型相关分析结果表明, 与化学成分达到显著相关的气象因子为5-8月的气温, 其中, 5、8月气温为化学成分的促进因子, 而6、7月气温为限制因子。在化学成分因子中, 烟碱和还原糖对气候条件反应最为显著, 且都表现为正相关; 气象因子与烟叶香吃味没有达到显著相关, 但可以看出, 7、8月份气温对烟叶香吃味的贡献率相对较大。可用性、口感受气象因子影响较大; 烟叶香吃味与化学成分的典型相关分析证明, 香韵、香气质和劲头受烟叶化学成分影响较大, 其中, 香气表现为负相关, 香韵和劲头表现为正相关。与烟叶香吃味有较高典型相关系数的为总糖和还原糖, 其中, 总糖表现为负相关, 还原糖表现为正相关。

关键词 [烤烟](#) [烟叶](#) [化学成分](#) [香吃味](#) [典型相关](#)

分类号 [S572.01](#) [S16](#)

Canonical correlation analysis among the weather factors, the chemical constitutions, aroma and flavor of tobacco leaves

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Abstract

Canonical correlation analysis among weather factors, chemical constitutions, aroma and flavor of tobacco leaves showed that canonical correlation between air temperature of May to August and chemical constitutions of tobacco leaves achieved significant level, and the air temperature of May and August was the promotive factor, the air temperature of Jun and July was the restricted factor. Among the chemical constitutions, the alkaloid of tobacco and reducing sugar response to weather factor were the most significant, and they were in positive correlation; There were no significant correlation between the weather factor, the aroma and the flavor of tobacco leaves, but it showed that the air temperature of July and August had higher contribution rate. The weather factors had the higher impact on usability and mouth feeling of tobacco leaves. The canonical correlation between chemical constitutions and the aroma and the flavor of tobacco leaves, showed that chemical constitutions had higher effect on the flavor, the quality of aroma and physiological strength; the quality of aroma showed negative correlation, the flavor and the physiological strength showed positive correlation. The total sugar and reducing sugar of tobacco achieved the higher canonical correlation between chemical constitutions and aroma and flavor of tobacco leaves, and the total sugar showed the negative correlation, reducing sugar showed positive correlation.

Key words [flue-cured tobacco](#) [tobacco leaves](#) [chemical constitutions](#) [aroma and flavor](#) [canonical correlation analysis](#)

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