

研究论文

不同肥料类型及成熟度对烤烟香气物质成分及香型的影响

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摘要 烟草香气是评价烟叶质量的重要因素之一。本研究对烤烟复气物质主要成分进行了定性鉴定, 共得出九类36种成分。含量较大的是新植二烯、烟碱、茄酮等。香型评定认为, 苯乙醛、苯乙醇等对烟香贡献较大。

对香气物质主要成分的定量研究表明:

(1) 在不同肥料处理下, 苯乙醛、2-呋喃甲醛等十种成分的含量均呈纯有机肥处理>有机肥无机肥混合处理>纯无机肥处理, 茄酮等成分爱施肥类型影响较小。

(2) 在烟叶成熟期间, 新植二烯、茄酮等成分在成熟时含量最高。十四碳酸等成分的含量从未熟到成熟一直在增加, 而苯一直在减少。厘哪土酮等成分的含量变化呈“V”字型。

关键词 [烤烟, 香气物质, 施肥类型, 成熟度, 定性, 定量](#)

分类号

Influence of Different Fertilizer Types and Maturity Stage on the Main Components of Aroma and Their Flavors in flue-Cured Tobacco

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Abstract The main components of the aroma matter in flue-cured tobacco were identified and qualitatively determined by GC/MS. The smoke flavor of individual components was also evaluated. The results indicated that the main components of the aroma matter of NC89 were neophytidien; nicotine; solanone; benzene-acetaldehyde; 10-isopropyl-3,7,13-trimethyl-2,6,11,13-tetradecan-1-ol; 1,3,6,10-cyclotetradecatetraene; 4,6(z), 8(E)-megastigmatrien-3-one; 1(2-6,6-trimethyl-1,3-cyclohexadien-1-yl)etc. The evaluation on smoke flavors of individual components indicated that low molecular weight matter, particularly carbonyls are more important to the aroma and flavor of flue-cured tobacco. Organic fertilizer tended to make neophytidien; benzene; 2-furancarboxaldehyde; solanone; β -damascone; benzeneethanol and hexadecanoic acid contents higher in the aroma matter, but those of 1,3,6,10-cyclotetradecatetraene-3,7,11-triethyl and benzaldehyde lower. Mineral fertilizers tended to make the contents of 10-iso-propyl-3,7,13-trimethyl-2,6,11,13-tetradecatetraen-1-ol; benzene; 1-ethyl-cyclohexane and 2-furancarboxaldehyde lower and solanone higher. The relative contents of 1,3,6,10-cyclotetradecatetraen-3,7,11-triethyl and 10-isopropyl-3,7,13-trimethyl-2,6,11,13-tetradecatetraen-1-ol are higher in mixed fertilizer than in mineral fertilizer. The contents of benzaldehyde; 2-furancarboxaldehyde and 10-isopropyl-3,7,13-trimethyl-2,6,11,13-tetradecatetraen-1-ol were the highest in fully ripened cured leaves. The order of the relative contents of neophytidien; solanone; prenylsolane in cured leaves were immature>overripened>ripened. The relative contents of benzeneethanol; β -damassone; benzene and hexadecanoic acid were the highest in immature than in ripened and overripened cured leaves.

Key words [Aroma matter](#) [Qualitative](#) [Component](#) [GC/MS](#) [Flue-cured tobacco](#)

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