



VOLATILE COMPONENTS OF STRAWBERRY JAM

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<https://doi.org/10.34302/crpjfst/2019.11.2.7>

Article history:

Received:

23 April 2018

Accepted:

10 March 2019

Keywords:

Compounds;

Flavor;

Jam;

Strawberry;

Volatiles

ABSTRACT

Strawberry jams of such cultivars as “Ducat”, “Honey” and “Polka” were studied to define the content of aromatic volatiles using the methods of highly efficient liquid chromatography. Volatiles contain a considerable amount of acids (65.6-76.8%), a small amount of furanone (8.3-14.6%) and that of aldehydes (3.4-10.8%). The share of esters in jams exceeds 0.7-3.1% of the total volatile amount. Typical compounds for strawberry jam flavor are hexanoic (caproic) acid, hexadecanoic acid, 2-ethyl hexanoic (capronic) acid, trans-cinnamic acid, linoleic acid, furil hydroxy methylketone, 2,5-dimethyl-4-methoxy-3(2H)-furanone (mesifurane), furfural, 5-hydroxymethylfurfural, vanillin. As to aroma activity furanone derivatives dominate: 2.4-dioxy-2.5-dimethyl-3(2H)-furan-3-one, 2.5-dimethyl-4-methoxy-3(2H)-furanone (mesifurane) та 2.5-dimethyl-4-hydroxy-3(2H)-furanone (furaneol); they add sweet caramel scents to jams. For strawberry jams of cultivar “Polka”, ethyl 2-methylbutanoate, decanal are active components which add fruity and grassy scents, strawberry jam made of cultivar “Ducat” – 2-decenal and γ - decalactone, ‘Honey’ - γ - decalactone (fruity, sweet) and linalool (sweet and floral scent).
