

Table of Contents

In Press

Article Archive

HORTSCI (45) 2018

HORTSCI (44) 2017

HORTSCI (43) 2016

HORTSCI (42) 2015

HORTSCI (41) 2014

HORTSCI (40) 2013

HORTSCI (39) 2012

Issue No. 1 (1-52)

Issue No. 2 (55-99)

Issue No. 3 (101-148)

Issue No. 4 (149-198)

HORTSCI (38) 2011

HORTSCI (37) 2010

HORTSCI (36) 2009

HORTSCI (35) 2008

HORTSCI (34) 2007

HORTSCI (33) 2006

HORTSCI (32) 2005

HORTSCI (31) 2004

HORTSCI (30) 2003

HORTSCI (29) 2002

Editorial Board

Ethical Standards

Reviewers 2017

For Authors

Author Declaration

Instruction for Authors

Submission Templates

Guide for Authors

Copyright Statement

Fees

Submission/Login

For Reviewers

Guide for Reviewers

Reviewers Login

Subscription

## Influence of terroir on the concentration of selected stilbenes in wines of the cv. Riesling in the Czech Republic

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The relationship between the terroir and the quality of grapes and/or wines is used in wine authenticity determination based on geographical origin. The phenolic compounds in grapes and wines are probably related to the terroir. The subject of the study was the analysis of 43 wines of the cv. Riesling from six wine-growing sub-regions, 16 different localities and four vintages to determine the content of trans-resveratrol, trans-piceid, cis-resveratrol and cis-piceid. The analyses were performed using an HPLC method. A relationship was observed between trans-resveratrol concentration in wines and wine-growing locality. The concentration of trans-resveratrol ranged from 0.04 to 0.82 mg/l with mean concentration of 0.28 mg/l. The highest concentrations of trans-resveratrol were found in wines from the localities Podmolí (0.66 mg/l), Hostěradice (0.64 mg/l and 0.82 mg/l), Mělník (0.59 mg/l) and Litoměřice (0.57 mg/l). Differences were also found in the relationship between trans-resveratrol and wine-growing sub-regions. Relationships between trans-piceid, cis-resveratrol or cis-piceid concentration and wine terroir were not demonstrated. The results of this study demonstrated the capability to differentiate the wine terroir using the trans-resveratrol concentrations.

**Keywords:**

authenticity; geographical origin; HPLC; resveratrol; winemaking

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