

Table of Contents

[In Press](#)[Online First](#)[Article Archive](#)[SWR \(13\) 2018](#)[SWR \(12\) 2017](#)[SWR \(11\) 2016](#)[SWR \(10\) 2015](#)[SWR \(9\) 2014](#)[SWR \(8\) 2013](#)[SWR \(7\) 2012](#)[SWR \(6\) 2011](#)[SWR \(5\) 2010](#)[Issue No. 1 \(1-38\)](#)[Issue No. 2 \(39-74\)](#)[Issue No. 3 \(75-119\)](#)[Issue No. 4 \(121-185\)](#)[SWR \(4\) 2009](#)[SWR \(3\) 2008](#)[SWR \(2\) 2007](#)[SWR \(1\) 2006](#)[Editorial Board](#)[Ethical Standards](#)[For Authors](#)[Author Declaration](#)[Instruction for Authors](#)[Submission Templates](#)[Copyright](#)[Guide for Authors](#)[Fees](#)[Submission/Login](#)[For Reviewers](#)[Guide for Reviewers](#)[Reviewers Login](#)[Subscription](#)

Humus content and quality under different soil tillage systems

L. Pospíšilová, N. Fasurová, V. Petrášová

<https://doi.org/10.17221/20/2009-SWR>

Citation: Pospíšilová L., Fasurová N., Petrášová V. (2010): Humus content and quality under different soil tillage systems. *Soil & Water Res.*, 5: 90-95.

[download PDF](#)

The main objective of our study was to compare the contents and quality of humic substances in selected soil types under different tillage regimes (deep, reduced, minimum). Non destructive spectroscopic methods such as UV-VIS and synchronous fluorescence spectroscopy were applied. After three years of experiments, no statistically significant differences in the total carbon content, labile carbon content, and humic substances carbon content were found. Humic substances quality and the absorbance in UV-VIS spectral range was the highest in Haplic Chernozem (minimum tillage). Fluorescence intensity varied in dependence on the soil types, however, the same main fluorophores in all samples were detected. Fluorescence of humic substances was the highest in Haplic Chernozem (minimum tillage). The determination of HS spectroscopic characteristics was found as a sensitive indicator for HS quality assessment.

Keywords:

soil humic substances; tillage regimes; UV-VIS and SFS spectroscopy

[download PDF](#)
[Impact factor \(Web of Sc Thomson Reuters\)](#)
2017: **0.882**

5-Year Impact Factor: 1.11

[SJR \(SCImago Journal Ra SCOPUS\)](#)

2017: 0.379 – Q3 (Aquatic : Q3 (Aquatic Science))

 Share
[New Issue Alert](#)Join the journal on [Facebook](#)[Similarity Check](#)

All the submitted manus checked by the [CrossRef Check](#).

[Abstracted/indexed in](#)

AGRI/FAO database
Biological Abstracts
BIOSIS Previews
CAB Abstracts
CNKI
Czech Agricultural and F
Bibliography
DOAJ (Directory of Open Journals)
EBSCO – Academic Searc Ultimate
Google Scholar
J-GATE
Journal Citation Reports/ Edition, Current Contents®/Agriculture, B and Environmental Scien Science Citation Index Ex SCOPUS
Web of Science®

[Licence terms](#)

All content is made freely for non-commercial purp users are allowed to copy redistribute the material, transform, and build upo material as long as they c source.

[Open Access Policy](#)

This journal provides imr open access to its conten principle that making res freely available to the puk supports a greater global exchange of knowledge.

[Contact](#)

Ing. Markéta Knížková
Executive Editor
phone: + 420 227 010 373
e-mail: swr@cazv.cz

Address

Soil and Water Research
Czech Academy of Agricultural
Sciences
Slezská 7, 120 00 Praha 2,
Republic

© 2018 Czech Academy of Agricultural Sciences