

N,N',N''*-Triferuloylspermidine, a New UV Absorbing Polyamine Derivative from Pollen of *Hippeastrum* × *hortorum

Nikolay Youhnovski, Christa Werner* and Manfred Hesse

Organisch-chemisches Institut der Universität Zürich, Winterthurerstrasse 190,
CH-8057 Zürich. Fax: +41-1-6356812. E-mail: cwerner@oci.unizh.ch

* Author of correspondance and reprint requests

Z. Naturforsch. **56c**, 526–530 (2001); received March 27, 2001

Amaryllidaceae, Anthers, Hydroxycinnamoyl polyamines

A new hydroxycinnamoyl polyamine derivative, *N,N',N''*-triferuloylspermidine (= (*E*)-*N*-(4-aminobutyl)-3,3',3''-tris(4-hydroxy-3-methoxyphenyl)-*N,N',N''*-(butane-1,4-diyl)tris [prop-2-enamide]) (**1**) was detected in the H₂O/MeOH extract of pollen from *Hippeastrum* × *hortorum*. The compound was identified by on-line-coupled high-performance liquid chromatography and atmospheric-pressure chemical-ionization mass spectrometry (HPLC-UV(DAD)/APCI-MS and MS/MS). The structure was proven by comparing the HPLC/MS data after UV-induced (*E*) ⇌ (*Z*) photoisomerization and catalytic hydrogenation of the natural compound and the synthetic reference compound. This is the first report of a triferuloylspermidine in nature.