Waters™

Note d'application

Flavonoids in Ginkgo

Waters Corporation

This is an Application Brief and does not contain a detailed Experimental section.

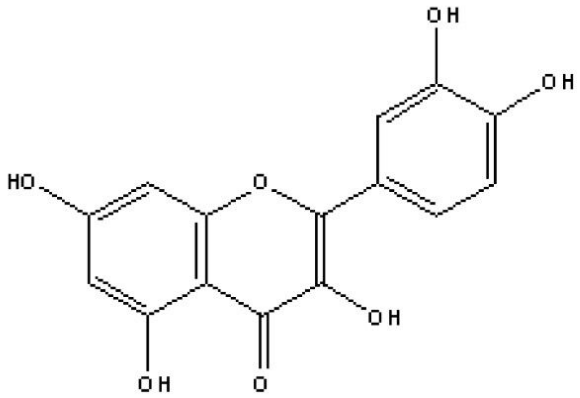
Abstract

This application brief demonstrates analysis of flavonoids in ginkgo.

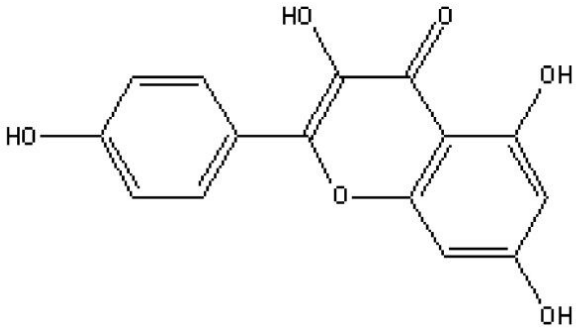
Introduction

The compounds used in this study are –

1. Quercetin
2. Kaempferol
3. Isorhamnetin



1. Quercetin



2. Kaempferol

Experimental

Sample Pre-Preparation

1 g sample is refluxed in 50 mL of ethanol: 3M HCl (70:30) for 2.5 hr

The cooled sample is adjusted to exactly 100 mL

0.3 mL of the ethanolic extract is diluted 1:10 with water

- Recovery, measured with certified standards at 100 ppm in reagent water, was 82% for quercitin and >90% for the other compounds

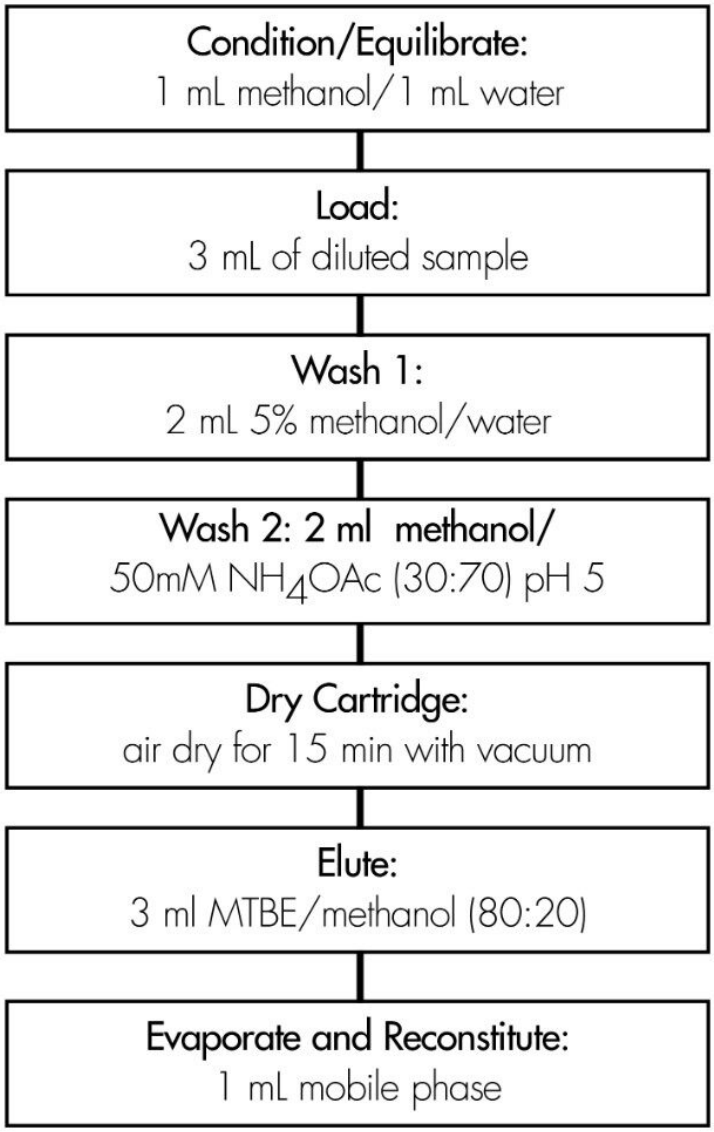
- All analyses gave results within ±40% of the expected values with the exception of the capsule (+60%)
- The selective SPE extraction and cleanup procedure provided a convenient analysis of ginkgo flavonoids in a complex matrix (Herbal One with 16 herbal ingredients)

HPLC Method

Column:	Symmetry C_{18}, 4.6 x 250 mm, 5 µm
Part number:	WAT054275
Mobile phase:	0.5% Phosphoric acid/Methanol 50:50
Flow rate:	1.5 mL/min
Injection volume:	10 µL
Temperature	25° C
Detection:	UV @ 270 nm 0.02 AUFS

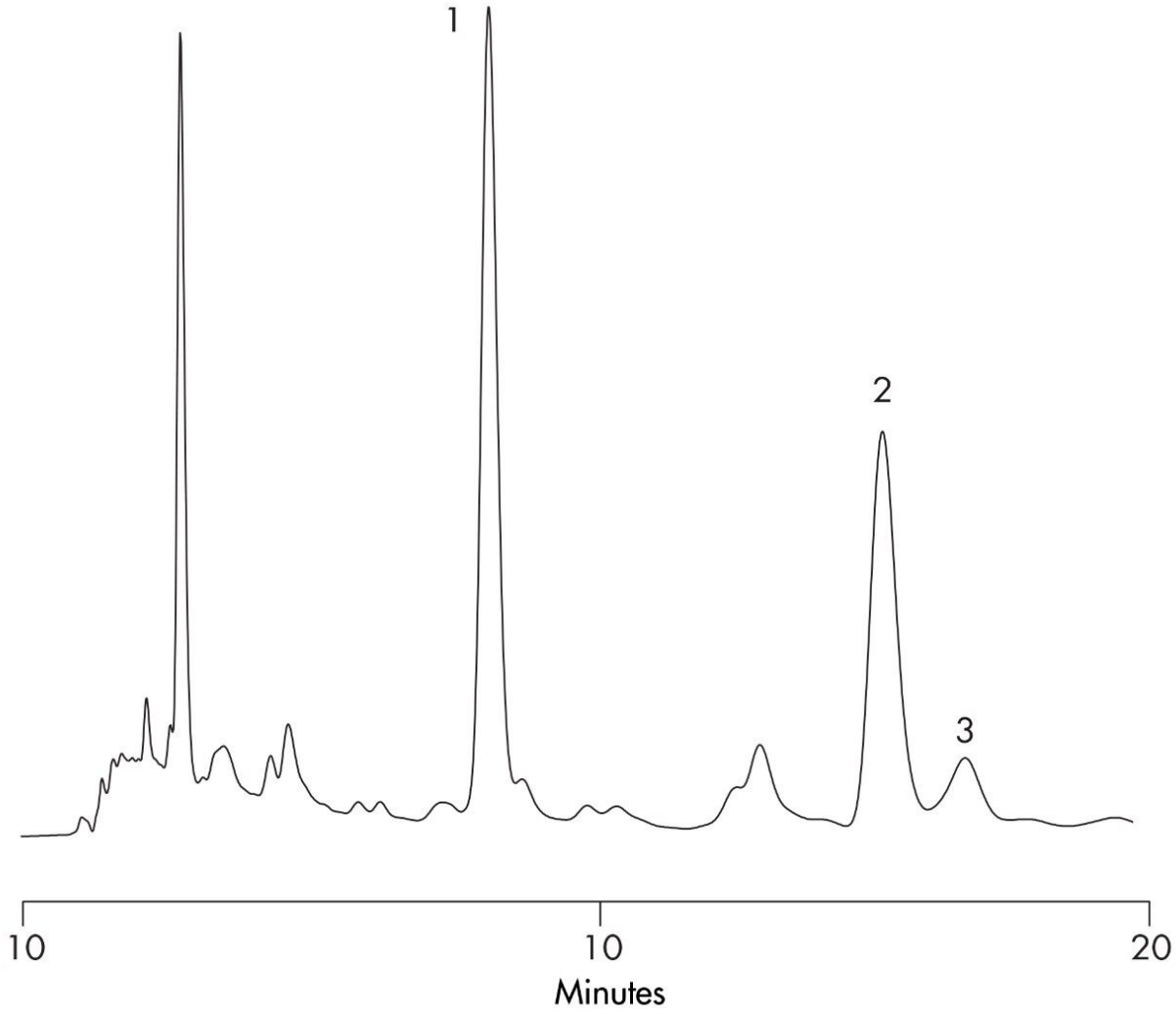
Oasis® HLB method for flavonoids in ginkgo

Conditions for Oasis® HLB cartridge, 3 cc, 60 mg
Part Number WAT094226



Results and Discussion

Compounds	% Recovery
1. quercetin	82%
2. kaempferol	>90%
3. isorhamnetin	>90%
total: 11 mg/tablet	



Featured Products

WA31763.84, June 2003