

MediHerb Echinacea

To uphold our industry-leading reputation for quality and results, MediHerb tests various products available to U.S. practitioners to ensure we are the brand meeting and exceeding your expectations with every bottle you purchase.

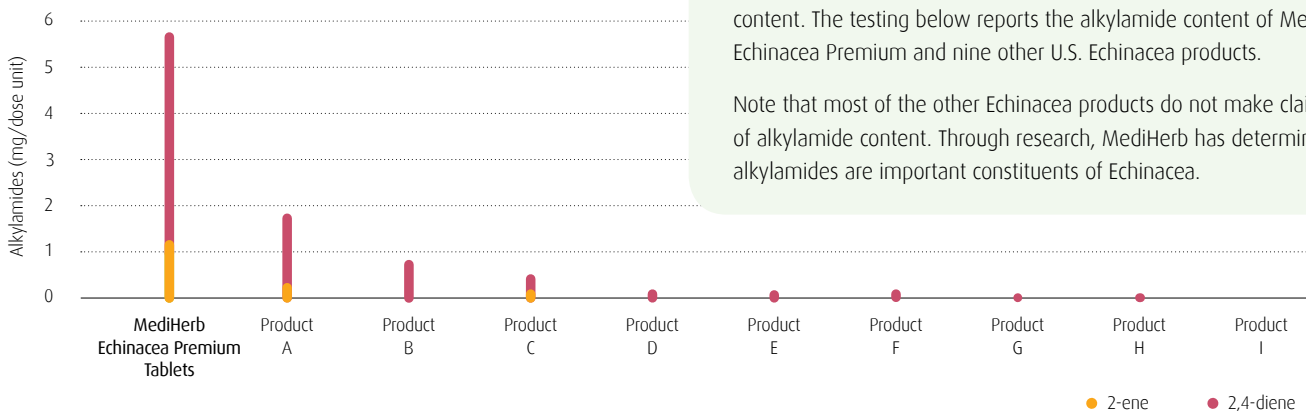
MediHerb's Echinacea extract defines quality in terms of potency and levels of the active constituents, **alkylamides**.

The
quality
choice for
practitioners

Noteworthy Facts

- **Alkylamides** are the clinically relevant active constituents of Echinacea and the major markers of quality and activity.¹
- **2-ene alkylamides**
 - occur in *Echinacea angustifolia* but barely or not at all in *Echinacea purpurea*
 - protect the 2,4-diene alkylamides against degradation by cytochrome P450 (CYP) enzymes and thus improve the bioavailability of these important bioactive alkylamides²
 - are an important measure of quality
- **2,4 diene alkylamides**
 - occur in both Echinacea species but are rapidly degraded by hepatic CYP enzymes unless protected by 2-ene alkylamides from *E. angustifolia*
 - are immune modulating
- The combination of both types of alkylamides in MediHerb's Echinacea Premium results in a unique, bioavailable and clinically efficacious product.*
- The true value of combining alkylamides from the two Echinacea species has come to light through MediHerb's extensive Echinacea research program, and the formulation is patented in Australia, New Zealand, USA and United Kingdom.
- Echinacea Premium provides the practitioner with a research-based, bioavailable, high-potency Echinacea product that is unrivaled.

Echinacea Solid Dose Product Comparison



MediHerb Echinacea products are labeled with their total alkylamide content. The testing below reports the alkylamide content of MediHerb Echinacea Premium and nine other U.S. Echinacea products.

Note that most of the other Echinacea products do not make claims of alkylamide content. Through research, MediHerb has determined alkylamides are important constituents of Echinacea.

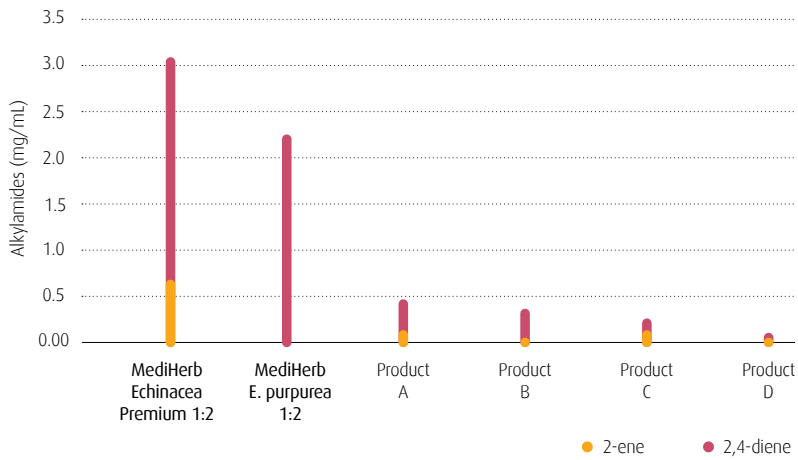
1. Ardjomand-Woelkart, K. and R. Bauer, *Echinacea a survey of current literature*. Zeitschrift für Phytotherapie, 2014. **35**(3): p. 128-135. 2. Matthias A, Gillam EM, Penman KG, Matovic NJ, Bone KM, De Voss JJ, et al. *Cytochrome P450 enzyme-mediated degradation of Echinacea alkylamides in human liver microsomes*. *Chem Biol Interact*. 2005;155:62-70.

Tablet Dosage Comparison

The table below shows the amount of tablets required to equal the alkylamides in one Echinacea Premium tablet.

MediHerb Echinacea Premium Tablets	Product A	Product B	Product C	Product D	Product E	Product F	Product G	Product H	Product I
1	2.4	5	9	18	22	22	63	159	341

Echinacea Liquid Extract Product Comparison



Liquid Dosage Comparison

The table below shows the amount of extract required to equal the alkylamides in one 5 mL daily dose of Echinacea Premium 1:2.

MediHerb Echinacea Premium 1:2	Product A	Product B	Product C	Product D
5 mL	32 mL	41 mL	75 mL	562 mL

Studies shown were conducted between 2014 and 2015 by an independent, TGA-licensed analytical laboratory. © 2017 MediHerb Pty Ltd. All rights reserved. LN0697 05/17

*** These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.**