- News Update -

American Herbal Pharmacopoeia®

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and Therapeutic Compendium Standards of Analysis, Quality Control, and Therapeutics

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AHP Releases Monograph Standards on Stinging Nettle Root (*Urtica dioica* L.)

The American Herbal Pharmacopoeia[®] (AHP), a California-based non-profit research organization, has released its quality control standards and therapeutic compendium for the popular botanical dietary supplement Stinging Nettle Root (*Urtica dioica* L.)

Each monograph establishes national standards for assuring authenticity, purity, and quality control of the monographed botanical. Accompanying the standards is the AHP Therapeutic Compendium which provides a complete and critical review of the pharmacological and safety data currently available, including information on pharmacokinetics, pharmacodynamics, actions, medical indications, historical and modern and traditional use, structure and function claims, dosages, interactions, side effects, contraindications, toxicology, and more.

Nettles roots have historically been used for urinary complaints and the AHP Therapeutic Compendium provides a critical review of the traditional and scientific data. The primary author of the Therapeutics section, which addresses pharmacology and clinical research, Dr. Sigrun Chrubasik, is an expert in clinical botanical medicine research and has published numerous scientific articles on a variety of botanical ingredients, with a focus on pain management and inflammation. According to Dr. Chrubasik's review, while there is less than definitive data regarding the full clinical utility of nettles roots, the data trends toward efficacy in its beneficial effects in treating prostate enlargement. In the Standards portion of the monograph, the compounds correlated with activity are similarly elusive, though there are indications for potential activity of a number of compounds including sterols, polysaccharides and *Urtica dioica* agglutinin (UDA). The testing requirements of the AHP monograph differ from those of USP. USP requires analysis of total amino acids as a surrogate marker for the putatively active nettles root protein UDA in addition to the compounds scopoletin and β-sitosterol. However, the proposed methodology may provide false positive results from degraded UDA, or from other unrelated proteins having a

similar amino acid profile. An immunochemical approach, such as ELISA, would be more appropriate, however, the necessary materials are currently unavailable. Similarly, while USP allows for mixtures of *Urtica dioica* and *Urtica urens* roots to be acceptable, AHP considers the roots of the two species to be too different to use interchangeably. According to AHP Executive Director Roy Upton, "It is clear that the above ground parts of *Urtica* species are very similar morphologically, chemically, and therapeutically. However, the roots are completely different in these regards and we do not believe they should be used interchangeably. There is little historical use for *Urtica urens* roots for urinary tract complaints and no scientific data supporting any such use."

The monograph can be ordered at www.herbal-ahp.org.