



# HerbClip™

Mariann Garner-Wizard  
John Neustadt, ND  
Cathleen Rapp, ND

Shari Henson  
Heather S Oliff, PhD  
Densie Webb, PhD

Brenda Milot, ELS  
Marissa Oppel, MS

*Executive Editor* – Mark Blumenthal

*Managing Editor* – Lori Glenn

*Consulting Editors* – Dennis Awang, PhD, Steven Foster, Roberta Lee, MD

*Funding/Administration* – Wayne Silverman, PhD

*Production* – George Solis/Kathleen Coyne

---

**FILE: ■Lavender (*Lavandula angustifolia*)**

**■Insomnia**

**■Aromatherapy**

**HC 010664-303**

**Date: April 28, 2006**

**RE: Lavender Oil Aromatherapy Clinical Trial – A New Method for Future Trials**

Lewith GT, Godfrey AD, Prescott P. A single-blinded, randomized pilot study evaluating the aroma of *Lavandula angustifolia* [sic] as a treatment for mild insomnia. *J Altern Complement Med.* August 2005;11(4):631-637.

Insomnia is defined as the subjective dissatisfaction with the duration or quality of sleep. Although some degree of insomnia affects one-third of the adult population each year, there is no drug that induces normal sleep. Further, the available drugs have drawbacks such as tolerance, dependency, withdrawal, and hangover effects. Aromatherapy is often used for insomnia, and it is increasing in popularity. Nonetheless, the evidence for the efficacy of aromatherapy for insomnia is lacking. Prior studies have poor methodology and are statistically underpowered. This report evaluates the methodology of a study that examined the affect of lavender essential oil (*Lavandula angustifolia*; Tisserand Aromatherapy; Sussex, UK) compared to almond carrier oil for the treatment of insomnia.

This study, which took place in the UK, was a single-blind, randomized, placebo-controlled crossover pilot study of lavender oil versus sweet almond oil delivered via an Aromastream vaporizer (Tisserand Aromatherapy). Ten healthy volunteers (5 men; 5 women) with insomnia, as evaluated by the Pittsburgh Sleep Quality Index, participated. There was a one-week treatment-free baseline period where sleep was evaluated. This was followed by 7 nights of exposure to essential oil or carrier oil, followed by a 7-night washout phase, and then 7 nights of exposure to the second oil. The participants used the aromas in their own homes. There was no measure of compliance. The primary outcome measure was the Pittsburgh Sleep Quality Index, which was completed at the end of each week. The Index scores the severity of sleep difficulty. Subjects also completed a Holistic Complementary and Alternative Medicine Questionnaire, which questions the subject's beliefs about the scientific validity of complementary and alternative medicine. Subjects also completed the Borkovec and Nau questionnaire, which assesses the credibility of the

blinding. This questionnaire was important because the scent of lavender cannot be blinded, so the other scent must appear to be efficacious. (The control does not have an aroma.)

According to the Pittsburgh Sleep Quality Index score, lavender created an improvement in insomnia ( $P < 0.07$ ). This is not statistically significant, but that is hardly surprising as the study was small. The almond oil did not improve sleep. There were no carry-over effects. Subjects younger than 39 years improved more than subjects older than 39 years. The female response to lavender was greater than the male response. A majority of the subjects found the Aromastream device to be noisy and many said that the Aromastream device caused sleep disturbances. These subjects turned off the machine and did not get the appropriate dose.

The authors conclude that this approach to evaluate the use of lavender for insomnia is appropriate. Different methods for delivery must be considered. Women with mild insomnia responded better to lavender than any other treatment group, but it is not known whether it was gender or severity that predicted outcome. Therefore both gender and severity should be stratified in future studies. Future studies should have subjects complete the Borkovec and Nau scale after smelling the scents and prior to initiating the study. If the subjects believe that lavender might be associated with a positive clinical effect it may bias the outcome. It would be preferable to use an essential oil not traditionally used for insomnia as the control. Since noise of the essential oil diffuser affected sleep for some of the participants, alternate methods of dispersion should be considered. If these were addressed, the methodology for future lavender aromatherapy studies using inhaled oils would be established; and reliable and convincing data could be generated.

—*Heather S. Oliff, PhD*

Enclosure: Referenced article reprinted with permission from Mary Ann Liebert, Inc., 2 Madison Ave., Larchmont, NY 10438; Telephone (914)834-3100; Fax (914)834-3582; email: info@liebert.com.

---

The American Botanical Council provides this review as an educational service. By providing this service, ABC does not warrant that the data is accurate and correct, nor does distribution of the article constitute any endorsement of the information contained or of the views of the authors.

ABC does not authorize the copying or use of the original articles. Reproduction of the reviews is allowed on a limited basis for students, colleagues, employees and/or members. Other uses and distribution require prior approval from ABC.