

# ZYLARIA™

## PROMOTES RELAXATION & SLEEP QUALITY

### WHAT IS ZYLARIA™?

Zylaria™ is NuLiv Science's proprietary extract from *Xylaria nigripes* fungus that contains many essential amino acids, vitamins, minerals, trace elements, glycoproteins, glutamic acid,  $\gamma$ -aminobutyric acid (GABA) and decarboxylase.

Zylaria™ has demonstrated *in-vivo* and in human clinical studies to regulate, support and promote relaxation, and improve sleep quality. On sleep, it is well established that glutamic acid assists the uptake of GABA to specific brain cell receptors and exerts a tranquilizing effect on the central nervous system.

### HOW ZYLARIA™ WORKS IN THE HUMAN BODY

Pharmacological studies<sup>(1)</sup> indicate that the amount of glutamic acid (Glu),  $\gamma$ -aminobutyric acid (GABA) and the ability to bind to GABA receptors in the brain were higher in subjects in the treatment group compared to subjects in the control group after the administration of Zylaria™.

Furthermore, the activity of glutamate decarboxylase (GAD) was also elevated. This suggests that Zylaria™ possesses the ability to facilitate the entry of Glu and GABA into the brain to activate the receptors of GABA and thus exert its sedative and sleep-promoting and mood elevating properties.

Pharmacodynamics study indicates the Glu and GABA content in the brain of tested mice were significantly increased after administration of Zylaria™ that correlates to the reduced time to sleep and length of sleep.

A Phase II & III clinical trial on 467 subjects from 11 hospitals indicated that Zylaria™ was able to improve the sleep quality over 90% of the participants, even after participants stopped taking Zylaria™ for two weeks.

### BENEFITS

- Improves sleep quality
- Promotes relaxation
- Elevates mood

### APPLICATIONS

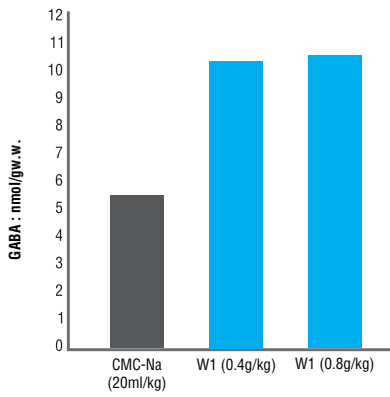
Sleep

Anxiety

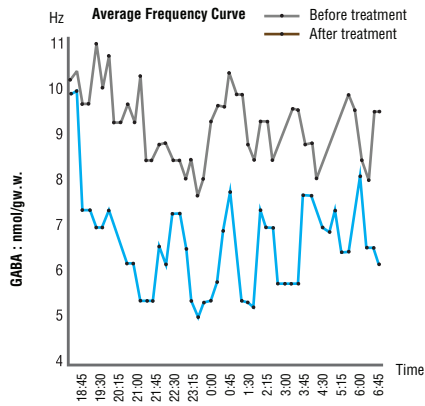
Mood



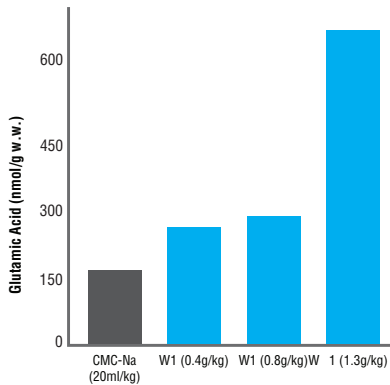
Effect of Zylaria™ on brain uptake of GABA in mice



Effect of Zylaria™ in lowering brain wave activity that leads to improved quality of sleep



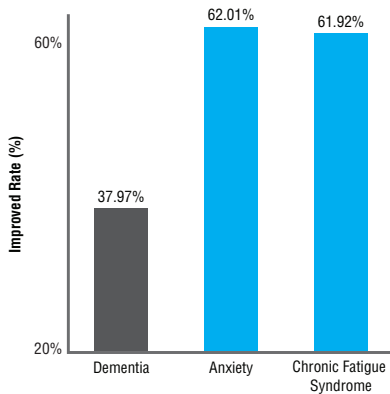
Effect of Zylaria™ on brain uptake of Glutamic Dehydrogenase in mice



PRODUCT PROPERTIES

- Composition: a proprietary extract of *Xylaria nigripes* mycelium by a proprietary fermentation technology
- Marker compounds: Total polysaccharides ≥ 1.5%
- Color: Dark brown
- Odor: Characteristic
- Taste: Slightly bitter
- Appearance: Fine granular powder
- Dose: 500mg-1,000mg
- Shelf life: 36 months
- Preservative: none
- Pesticide & herbicide residues: NO more than detection limits

Effect of Zylaria™ on brain uptake of Dementia, Anxiety, and Chronic Fatigue Syndrome



REFERENCES

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**Zylaria™**

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