

## Documents

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**Stress-relieving properties of a polyherbal blend with *Syzygium aromaticum* L. and *Coffea canephora* Pierre ex A. Froehner: A review and bibliometric analysis**  
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### Abstract

Objective: *Syzygium aromaticum* and *Coffea canephora* are acknowledged for their outstanding antioxidant, anti-inflammatory, and nerve-stimulant properties, showcasing potential in brain protection. Therefore, this study aims to quantitatively review existing literature and assess the potential of using it to formulate a herbal tea blend for managing stress and anxiety. Methods: Data was retrieved from the Scopus database, and a bibliometric analysis was performed using VOSviewer software. Results: Following a screening process, a total of 121 articles were identified, with *S. aromaticum* yielding a higher number compared to *C. canephora*. A detailed exploration of each plant revealed active components such as eugenol,  $\beta$ -caryophyllene,  $\alpha$ -humulene, caffeine, mangiferin, and chlorogenic acids, each exhibiting stimulatory effects alongside antioxidant and anti-inflammatory properties. The neuroprotective effects were attributed to the reduction of oxidative stress and inflammation, coupled with the stimulation of neurotransmitters and hormones like dopamine, serotonin, cortisol, and adrenaline. Conclusions: The review showed that these plants positively affect mood and cognition by influencing the brain's pleasure system. This suggests the need for further research to combine these plant extracts for developing 'Tenang tea', a potential herbal blend for managing stress and anxiety. © 2024 Informa UK Limited, trading as Taylor & Francis Group.

### Author Keywords

Anti-stress; anxiety; *Coffea canephora*; oxidative stress; *Syzygium aromaticum*

### Index Keywords

antioxidant, caffeine, caryophyllene, chlorogenic acid, epinephrine, eugenol, humulene, hydrocortisone, mangiferin, methylpentynol, plant extract, antiinflammatory agent, antioxidant, plant extract; anxiety, bibliometrics, brain protection, clove, *Coffea canephora*, cognition, controlled study, herbal tea, human, inflammation, mood, neuroprotection, nonhuman, oxidative stress, physiological stress, pleasure, review, tea, animal, chemistry, *Coffea*, drug therapy, mental stress, *Syzygium*; Animals, Anti-Inflammatory Agents, Antioxidants, Bibliometrics, *Coffea*, Humans, Plant Extracts, Stress, Psychological, *Syzygium*

### Chemicals/CAS

caffeine, 58-08-2; caryophyllene, 87-44-5; chlorogenic acid, 327-97-9; epinephrine, 6912-68-1, 51-43-4, 55-31-2; eugenol, 97-53-0; humulene, 6753-98-6; hydrocortisone, 50-23-7; mangiferin, 4773-96-0; methylpentynol, 77-75-8; Anti-Inflammatory Agents; Antioxidants; Plant Extracts

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