

(54) Title of the invention : NEUROPROTECTIVE AND CNS MODULATORY EFFECTS OF METHANOLIC EXTRACT OF CASSIA ANGUSTIFOLIA LEAVES

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application Number Filing Date</p> <p>(62) Divisional to Application Number Filing Date</p>	<p>:A61P0025280000, A61P0025240000, A61P0025000000, A61P0025220000, A23L0033105000</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:</p> <p>:01/01/1900</p> <p>: NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p> <p>:NA</p>	<p>(71)Name of Applicant :</p> <p><b>1)Dr. Prashant Kumar</b> Address of Applicant :Assistant Professor, Sahu Onkar Saran School of Pharmacy, Faculty of Pharmacy, IFTM University, Moradabad, Uttar Pradesh, Pin Code:244102 Uttar Pradesh India</p> <p><b>2)Mr. Mohd Abid Malik</b></p> <p><b>3)Dr. Geeta Saroha</b></p> <p><b>4)Mr. Seti Sagar</b></p> <p><b>5)Mr. Saiyad Arsh Zia</b></p> <p><b>6)Mr. Shailender Mishra</b></p> <p><b>7)Dr. Prachi Tayal</b></p> <p><b>8)Mr. Kavendra Singh</b></p> <p>(72)Name of Inventor :</p> <p><b>1)Dr. Prashant Kumar</b></p> <p><b>2)Mr. Mohd Abid Malik</b></p> <p><b>3)Dr. Geeta Saroha</b></p> <p><b>4)Mr. Seti Sagar</b></p> <p><b>5)Mr. Saiyad Arsh Zia</b></p> <p><b>6)Mr. Shailender Mishra</b></p> <p><b>7)Dr. Prachi Tayal</b></p> <p><b>8)Mr. Kavendra Singh</b></p>
--	---	--

## (57) Abstract :

The present invention relates to the neuroprotective and central nervous system (CNS) modulatory potential of Cassia angustifolia leaves. The invention discloses a method for extraction, wherein the leaves are collected, authenticated, defatted with petroleum ether, and subjected to Soxhlet extraction using methanol to obtain a standardized methanolic extract (MECAL) with a yield of 6–8% w/w. The extract was evaluated in animal models, including the elevated plus maze, forced swim test, tail suspension test, and open field test, to assess anxiolytic and antidepressant-like effects. Results demonstrated a dose-dependent reduction in immobility time, increased exploratory behavior, and enhanced central activity, with higher doses showing activity comparable to Diazepam. The invention provides a safe, plant-based, and cost-effective alternative to synthetic CNS drugs, suitable for therapeutic applications in the management of anxiety, depression, cognitive dysfunction, and neurodegenerative disorders. This invention offers a novel herbal intervention for neurological health with reduced side effects.

No. of Pages : 14 No. of Claims : 6