(19) INDIA

(22) Date of filing of Application :26/09/2022

(43) Publication Date: 07/10/2022

(54) Title of the invention: ANTIFERTILITY AND ESTROGENIC EFFECTS OF SIDA ACUTA ROOT ON EXPERIMENTAL ANIMAL MODELS

 $: A61K0036185000, \ A61K0031567000, \ A61K0031715000, \ A61K0047400000, \\$ (51) International classification A23L0033105000 (86) International Application No :NA Filing Date
(87) International Publication No
(61) Patent of Addition to Application :NA : NA :NA :NA Filing Date (62) Divisional to Application Number :NA Filing Date

(71)Name of Applicant:

1)DR. DUSMANTA KUMAR PRADHAN
Address of Applicant: RAIGARH COLLEGE OF PHARMACY, RAIGARH (C.G), INDIA --2)DR. S.KARNA
3)DR. VARSHA TIWARI
4)DR. M.EMISHRA
5)DR. KOUSHLESH KUMAR MISHRA
6)DR. SUNL SINGH
7)DR. ABHISHEK TIWARI
8)DR. MANISH KUMAR
9)DR. AJAY SHARMA
10)DR. ROHIT SINGH
Name of Applicant: NA Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : //2/Name of Inventor:
1)DR. DUSMANTA KUMAR PRADHAN
Address of Applicant: RAIGARH COLLEGE OF PHARMACY, RAIGARH (C.G), INDIA2)DR. S.KARNA Address of Applicant: SCHOOL OF CHEMISTRY, SAMBALPUR, UNIVERSITY, SAMBALPUR, ODISHA-768029 --3)DR. VARSHA TIWARI
Address of Applicant :PHARMACY ACADEMY, IFTM UNIVERSITY, LODHIPUR, RAJPUT, MORADABAD, U.P. 244102 ----4)DR. M.R.MISHRA Address of Applicant : GAYATRI COLLEGE OF PHARMACY, SAMBALPUR, ODISHA-768004. -5)DR. KOUSHLESH KUMAR MISHRA
Address of Applicant : SHRI SAI COLLEGE OF PHARMACY, DIST, PRAYAGRAJ (U.P.) -----6)DR. SUNIL SINGH Address of Applicant :PROFESSOR & PRINCIPAL, SHRI SAI COLLEGE OF PHARMACY, DIST, PRAYAGRAJ (U.P.) ---7)DR. ABHISHEK TIWARI Address of Applicant :PHARMACY ACADEMY, IFTM UNIVERSITY, LODHIPUR, RAJPUT, MORADABAD, U.P. 244102 ----

PJDR. AJAY SHARMA

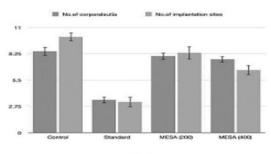
Address of Applican: PROFESSOR, GOVT. OF NCT OF DELHI, DELHI PHARMACEUTICAL SCIENCES AND RESEARCH

UNIVERSITY, PUSHPVIHAR, NEW DELHI 110017

10)DR. ROHIT SINGH

Address of Applicant :PROFESSOR, SHRI SAI COLLEGE OF PHARMACY, PRAYAGRAJ, UTTAR PRADESH ---

(57) Abstract:
ANTIFERTILITY AND ESTROGENIC EFFECTS OF SIDA ACUTA ROOT ON EXPERIMENTAL ANIMAL MODELS Herbal medications have been used for centuries in traditional Indian medicine to reduce fertility in several regions. Even if herbal medications have been used for a considerable amount of time, their effectiveness and safety cannot be guaranteed by this fact alone. The purpose of this research was to conduct effectiveness and safety investigations on Sida acuta root, an antifertility plant widely used in Asian countries. It was shown that the methanolic extract of the root has antifertility properties in female rats. The root of the plant was found to include alkaloids, flavanoids, sterols, and glycosides as secondary metabolites. It was shown that the extract was more effective in reducing the number of litters born (50 percent) and causing considerable anti-implantation activity (3.29) than the control in postcoital testing. An antiestrogenic activity of 265.16 mg/100g b/w was seen in immature ovariectomized rats when the extract was administered in combination with Ethinyl estradiol alone (120.66 mg/100g b/w). The methanolic extract from Sida acuta was shown to have antifertility effects and was found to be safe when used at the effective dosages found in this research.



No. of Pages: 23 No. of Claims: 3