

VIVEKANAND COLLEGE, KOLHAPUR

(Empowered Autonomous)

SEED MONEY SCHEME FOR RESEARCH

Annual Report of the work done on the Research Project

(Report to be submitted within 2 months after completion of each year).

- 1) Project report No. 1 /2nd (Final) : 1
- 2) University/ College Reference No. : Ref. No. VCK-2022-23
- 3) Period of report: from 01/11/2022-31/10/2023
- 4) Title of research project:-**Extraction of essential oil from various spices and studying its antimicrobial and antifungal activity**
- 5) (a) Name of the Principal Investigator: Ms.Nadaf S.H.
(b) Dept. and College where work has progressed: Department of Biotechnology optional
Vivekanand College, (Empowered Autonomous) Kolhapur
- 6) Effective date of starting of the project: 01-11-2022
- 7) Grant approved and expenditure incurred during the period of the report:
 - a. Total amount approved Rs.1, 15,000
 - b. Total expenditure Rs. 15000
 - c. Report of the work done: (Please attached a separate sheet)

1)	Brief objective of the project	1.Extraction of essential oil from various spices using hydro distillation 2.Study its antifungal 3. Study of antimicrobial activity
2)	Work done so far and results achieved and publications, if any, resulting from the work (Give details of the papers and names of the journals in which it has been published or accepted for publication	Paper communicated to Biomedicine journal
3)	Has the progress been according to original plan of work and towards achieving the objective, if not, state reasons	Yes
4)	Please indicate the difficulties, if any, experienced in implementing the project.	-
5)	If project has not been completed, please indicate the approximate time by which it is likely to be completed. A summary of the work done for the period (Annual basis) may please be sent to the University on a separate sheet	Ongoing
6)	If the project has been completed, please enclose a summary of the findings of the study. Two bound copies of the final report of work done may also be sent to the University.	-
7)	Any other information which would help in evaluation of work done on the project. At the completion of the project, the first report should indicate the output, such as (a) Manpower trained (b) Ph. D. awarded (c) Publication of results (d) other impact, if any.	-

Signature of the Principal Investigator

Ms. Nadaf S.H.

Signature of the Principal



Ms. Nadaf S.H.
PRINCIPAL

Recommendation of the expert committee about continuation of the project after 1" year.
(EMPOWERED AUTONOMOUS)

Report of the work done:

Extraction of essential oil from various spices and studying its antimicrobial and antifungal activity

Oils are simple lipids, which are composed of fatty acids. Fatty acids are classified as essential as well as non-essential. oils are mainly present in plant seed oils for example olive oil kalonji seed oil as well as cotton seed oil there are different methods of extraction of these essential oils because these oils with combination acts as good medicine

In first part of the project different oil samples are used like Kalonji (Nigella sativa), Olive oil and cotton seed oil. Different extract were prepared by using alcohol acetone, acid and aqueous system are prepared and subjected to hydro distillation.

Different phytochemical analysis test are carried out, Alkaloids test, Steroid test, Phenol test, Terpenoids test as well as Flavonoids, Saponin, Glycoside and tannins test respectively of selected three oils

Name of the Principal Investigator: Ms.Nadaf S.H.
Department of Biotechnology optional
Vivekanand College, (Empowered Autonomous)

Nadaf

