

Date: 15/06/2022

CERTIFICATE

This is to certify that the project entitled "Evaluation of total phenol and flavonoid content in some medicinal plants of Acanthaceae" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Aiswarya Rose Antony Reg. No PWAUMBT001 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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CERTIFICATE

This is to certify that the project entitled "Sulphur level of Coffee soils in Wayanad region and the effect of different organic sources on available Sulphur status" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Amitha Sajeev. Reg. No PWAUMBT002 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.





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This is to certify that the project entitled "Study on *in vitro* clonal propagation of economically important Ayurvedic medicinal plant *Indigofera tinctoria* L." submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Anargha S.L., Reg. No PWAUMBT003 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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This is to certify that the project entitled "Influence of organic nutrient spray on Robusta coffee." submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Anjana A.K. Reg. No PWAUMBT004 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this formed the basis for the of dissertation has award any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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This is to certify that the project entitled "In vitro anti-inflammatory activity of aquous leaf extract of Annona squamosa in HRBC membrane" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Athulya K.C. Reg. No PWAUMBT005 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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This is to certify that the project entitled "Synthesis of silver nanoparticles and phytochemical analysis of folkloric medicinal plant *Pisonia grandis* R.Br" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Deepika Deepak Reg. No PWAUMBT006 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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Phone 0495 2371696 (Office), 0495 2537155 (Principal)

https://providencecollegecalicut.ac.in/ e mail: botanypwc@providencecollegecalicut.ac.in

Date: 23/07/2022

CERTIFICATE

Certified that this dissertation entitled Biogenic synthesis of Silver Nanoparticles using Cardamine hirsuta L. and its Characterization was the original research work carried out by Ms. Theertha M. D., Reg. No. PWAUMBT015 under my supervision and guidance during the year 2021-22.

Supervising teacher

Head of the Department

Den

Head
Department of Botany
Providence Women's College
Kozhikode-673009, Kerala

Examiners

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Date: 23/07/2022

CERTIFICATE

Certified that this dissertation entitled 'COMPARATIVE PHYTOCHEMICAL ANALYSIS OF CAULERPA RACEMOSA(Forsskal)J. Agardh AND CAULERPA TAXIFOLIA (M. Vahl) C. Agardh' was carried out by Ms. Fidha Fathima K P, Reg. No PWAUMBT007 under my supervision and guidance during the year 2021-22.

Supervising teacher:

HoD:

Head
Department of Botany
Providence Women's College
Kozhikode-673009, Kerala

Examiners

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Date: 15/06/2022

CERTIFICATE

This is to certify that the project entitled "Phytoremediation potential of Acanthus ilicifolius L. with a note on morphological and biochemical changes towards heavy metal stress" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Gopika V.M. Reg. No PWAUMBT008 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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Date: 15/06/2022

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Date: 15/06/2022

CERTIFICATE

This is to certify that the project entitled "Ethnomedicinal properties of plants used by Paniya tribe from Wayanad, Kerala." submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Layana O.B. Reg. No PWAUMBT011 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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This is to certify that the project entitled "Biogenic synthesis of silver nanoparticles using Clerodendrum infortunatum extract and its characterization" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Salva C. Reg. No PWAUMBT012 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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This is to certify that the project entitled "Biogenic synthesis of silver nanoparticles using *Pennisetum polystachion* extract and its characterization." submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by **Ms. Sariga K.P.,** Reg. No **PWAUMBT013** during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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Date: 15/06/2022

CERTIFICATE

This is to certify that the project entitled "Phytochemical characterization and extraction of starch in *Curcuma aeruginosa* Roxb and *Maranta arundinacea* L" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by Ms. Sruthi Raj M.J., Reg. No PWAUMBT014 during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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CERTIFICATE

This is to certify that the project entitled "Floral biology, floral phenology and pollination aspects in *Chassalia curviflora* (wall.) Thwaites" submitted to the university of Calicut in partial fulfillment of the requirements for the award of degree of Master in Science in Botany, is an authentic record of work done by **Ms. Fathima Febin C.P.** Reg. No **PWAUMBT016** during the period of her study in the Department of Botany, Providence Women's College, Kozhikode during 2020-2022. No part of this dissertation has formed the basis for the award of any Degree/Diploma/Association/Fellowship or similar title to any candidate of any other college and university.

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