

ELECTROSTATIC POLLEN COLLECTOR FOR COCONUT PALM

By

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(2022-28-002)



**DEPARTMENT OF FARM MACHINERY AND POWER ENGINEERING
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KERALA, INDIA**

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ELECTROSTATIC POLLEN COLLECTOR FOR COCONUT PALM

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ATHIRA, P.

(2022-28-002)

THESIS

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requirements for the degree of

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2026

DECLARATION

I, hereby declare that this thesis entitled “ELECTROSTATIC POLLEN COLLECTOR FOR COCONUT PALM” is a bonafide record of research work done by me during the course of research and the thesis has not previously formed the basis for the award to me of any degree, diploma, associateship, fellowship or other similar title, of any other University or Society.

Tavanur

Date: 14.08.2026



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CERTIFICATE

Certified that this thesis entitled “ELECTROSTATIC POLLEN COLLECTOR FOR COCONUT PALM” is a record of research work done independently by Athira P. (2022-28-002) under my guidance and supervision and that it has not previously formed the basis for the award of any degree, diploma, fellowship or associateship to her.



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*Dedicated to my
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LIST OF SYMBOLS AND ABBREVIATIONS

$\pm$	:	Plus or minus
$\times$	:	Multiplication
$^{\circ}$	:	Degree
$^{\circ}\text{C}$	:	Degree centigrade
AC	:	Alternate Current
DC	:	Direct Current
C	:	Coulomb
pC	:	Pico Coulomb
fC	:	Femto Coulomb
<i>et al.</i>	:	and others
FMPE	:	Farm Machinery and Power Engineering
mm	:	Millimeter
cm	:	Centimeter
m	:	Meter
μm	:	Micrometer
AM	:	Ante Meridiem
kg	:	Kilogram
$\text{kg}\cdot\text{m}^{-3}$	:	Kilogram per meter cube
mg	:	Milligram
g	:	Gram
h	:	Hour
$\text{mC}\cdot\text{kg}^{-1}$	:	Milli Coulomb per kilogram
Pa	:	Pascal
kPa	:	Kilo Pascal
ha	:	Hectare
$\text{m}\cdot\text{s}^{-1}$	:	Meter per second
s	:	Second
%	:	Per cent
$\text{g}\cdot\text{L}^{-1}$	:	Gram per liter
F	:	Farad

nF	:	Nano Farad
μ F	:	Micro Farad
$F \cdot m^{-1}$	:	Farad per meter
h	:	Hour
N	:	Newton
V	:	Volt
A	:	Ampere
mA	:	Milli ampere
μ A	:	Micro ampere
W	:	Watts
kWh	:	Kilo watt hour
mAh	:	Milli ampere hour
kV	:	Kilo volt
$kV \cdot m^{-1}$	:	Kilo volt per meter
$V \cdot m^{-1}$	:	Volt per meter
Hz	:	Hertz
kHz	:	Kilo hertz
Pa	:	Pascal
HV	:	High Voltage
FEA	:	Finite Element Analysis
Ω	:	Ohm
M Ω	:	Mega ohm
μ	:	Micro
σ	:	Greek small letter sigma
ε	:	Greek small letter epsilon
$\emptyset$	:	Greek small letter phi
Rs.	:	Rupees