## 2<sup>nd</sup> National Conference On

# VISION-2047 TECHNOLOGY INTERVENTION FOR PROSPECTS OFAGRICULTURE IN INDIA. (TIPAI-2024)

17th Feb-2024



## **Book of Abstract**



Department of Agricultural Economics
JSA College of Agriculture and Technology
(Affiliated to Tamil Nadu Agricultural University)
Ma.Podaiyur, Cuddalore (Dt.) - 606 108
Tamil Nadu

## Proceedings of the 2<sup>nd</sup> National Conference on Vision-2047

### TECHNOLOGY INTERVENTION FOR PROSPECTS OF AGRICULTURE IN INDIA (TIPAI-2024)

© Department of Agricultural Economics, JSA College of Agriculture and Technology, Cuddalore (Dt), Tamil Nadu. February - 2024.

No part of the material protected by this copyright notice may be reproduced or utilized in any form of by any means, electronic or mechanical including photocopying, recording or by any information storage and retrieval system, without prior written permission from the copyright owner

ISBN: 978-81-968804-5-3

Published by

JSA College of Agriculture and Technology

Ma, Podaiyur, Cuddalore (Dt), Tamil Nadu – 606 108

Published for

**Department of Agricultural and Economics** 

JSA College of Agriculture and Technology Ma, Podaiyur, Cuddalore (Dt), Tamil Nadu- 606 108



#### 2<sup>nd</sup> NATIONAL CONFERENCE ON

## Technology Intervention For Prospects of Agriculture In India 17th February 2024



# Basic Properties of Soilless Substrates for Urban and Peri -Urban Agriculture (UPA) Food Production

#### Anbarasu Mariyappillai \*1, Kumaresan Marappan<sup>2</sup> and Gurusamy Arumugam<sup>3</sup>

\*\*IAssistant Professor of Agronomy, School of Agriculture, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Pallavaram - 600117 Chennai, Tamil Nadu, India.

<sup>2</sup>Assistant Professor of Horticulture, School of Agriculture, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Pallavaram - 600117 Chennai, Tamil Nadu, India.

<sup>3</sup>Professor of Agronomy, Department of Agronomy, AC&RI, Tamil Nadu Agricultural University, Madurai - 625104 Madurai, Tamil Nadu, India.

\*For correspondence. Mail: manbarasu102@gmail.com

#### **ABSTRACT**

Soilless agriculture is steadily becoming a subject discussed broadly in industrial and scientific communities. In this point is more important to know about a growing medium. Growing substrates is a substance through which plant roots grow and extract water and nutrients. Selecting a good growing medium is fundamental to good soilless agriculture. This study focused on the physical, chemical and hydrological characteristics of coco pith, perlite, vermiculite, vermin compost, sand, rice husk, paddy straw, sawdust and Rockwool. However, no one growing medium works best in all situations because the media's physical, chemical and hydrological properties are not constant, but rather can be affected by the grower. This article mainly, to understanding the dynamic nature of soilless substrates. The results showed that the physical, chemical and hydrological characteristics of the soilless media.

*Keywords:* Soilless agriculture, soilless medium, coco pith, perlite, vermiculite, vermin compost, sand, rice husk, paddy straw, saw dust, rock wool.

