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**AgSURS - Reviewer 1 View**

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| **Abstract Title** | Encourage Synchronize Flower Bud Initiation of Soursop (*Annona muricata* L.) by Using Synthetic Plant Growth Regulators |
| **Abstract Body** | Soursop fruits contribute a very small portion of Sri Lanka's export revenue. This might be due to several limitations, including asynchronized blooming, less fruit setting, and prolong time for fruit maturation. Therefore, encouraging of synchrone flowering is an important aspect for higher yield of Soursop. Hence, a field trial was conducted at the Fruit Research and Development, Horana, Sri Lanka, from September to December 2022. As synthetic plant growth regulators, namely; gibberellic acid, salicylic acid, paclobutrazol, and ethereal used as treatments under three concentrations [T1(Salicylic acid 200ppm), T2 (Salicylic acid 300ppm), T3 (Salicylic acid 400ppm), T4 (Ethereal 100ppm), T5 (Ethereal 150ppm), T6 (Ethereal 200ppm), T7 (Gibberellic acid 100ppm), T8 (Gibberellic acid 150ppm), T9 (Gibberellic acid 200ppm), T10 (Paclobutrazol 1000ppm)T11 (Paclobutrazol 2000ppm), T12 (Paclobutrazol 3000ppm) T13(Ethanol 50% solvent, control 1) and T14 (No treatment, control 2). The experiment was laid out in Randomized Complete Block Design (RCBD) with three replicates. The number of flowers that bloomed after treatment applications were counted weekly interval. Pollen viability and stigma size were checked 15 weeks after treatment application. Data were analyzed through Kruskal–Wallis test and ANOVA. Results revealed that foliar application of 200 ppm salicylic acid has given more flowers (51) than other treatments. Moreover, pollen viability and stigma size were not significantly differed between treatments. Thus, the study concludes that salicylic acid concentrated at 200 ppm is a viable option for synchronize flowering of soursop. |
| **Key Words (5 Words)** | Foliar applications, plant growth regulators soursop, , synchronize flowering |
| **Abstract ID** | CPT1436 |
| **Findings of this study (r1)** | ……………………………………………………………………………………………………………………………………..   1. Make a significant contribution to existing knowledge 2. Make a marginal contribution to existing knowledge 3. Contain conceptual errors/faulty judgments 4. Confirm known results |
| **Title of the abstract(r1)** | …………………………………………………………………………………………………………………………………….   1. Is appropriate to the thematic area and descriptive 2. Needs improvement |
| **If needs more improvements for**  **"Title" please specify here(r1)** |  |
| **The content of the abstract(r1)** | ………………………………………………………………………………………………………………………………………   1. Is clear and concise 2. Needs improvements |
| **If needs more improvements for "Abstract" please specify here(r1)** | Objectives of the study should be clearly mentioned. Comparison of the results of the treatments should be included. |
| **Recommendation(r1)** | ………………………………………………………………………………………………………………………………………   1. Accept in the present form with minor editorial corrections 2. Accept with minor corrections 3. Accept with major revisions cited 4. Reject |
| **Please justify reasons for If rejection(r1)** |  |
| **Any Other**  **Comment(r1)** |  |
| **Any Other**  **Attachment(r1)** |  |

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