

Let's identify Coried bug of Coconut, How it can be controlled

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Introduction

The Coried Bug, scientifically known as *Paradasynus rostratus*, is a destructive pest that poses a significant threat to coconut plantations in various regions of Kerala, particularly in the southern districts of Thiruvananthapuram, Kollam, and Alappuzha. This pest belongs to the Corridae family and is a sucking pest and primarily feeds on tender nuts, causing severe damage to yield of the coconut palms. The infestation of the Coried Bug results in the shedding of buttons, leading to substantial yield losses. Affected bunches may become empty or fail to bear fruit, while mature nuts exhibit cracks and pits in their husks as a consequence of the pest's attack. The presence of eye-shaped spots serves as a characteristic indication of this infestation. Regrettably, many farmers remain unaware that these bugs are responsible for this problem, often expressing concerns about fruitless or prematurely falling bunches.

Furthermore, besides coconuts, the Coried Bug also targets other plants such as guava, tamarind, and buds of the neem plants. This article discusses, the impact of the Coried Bug on coconut palms and effective measures for its control and management.

Life Cycle

The life cycle of the chocolate brown bug, known as the Coried, begins with the female laying 30 to 55 eggs at a time in a beautiful pattern. The eggs are

laid in inconspicuous places, including areas such as Coconut's Spathe, Rachils, Petioles, and Immature nuts. In some cases, they have been observed laying eggs on windowsills of houses. The eggs, which are pale yellow in colour, hatch within 10 days, and their colour turns red during hatching. The newly hatched nymphs are often mistaken for red ants. As they progress through the first and second stages of growth they can be found in groups. After around 30 days, the mature nymphs started to suck juice of nuts. At this stage, their colour changes to reddish black.

The nymphs reach their full growth in 30 days and then climb onto newly opened inflorescences to drink the sap of buttons. They also commonly attack unpollinate/pollinated nuts up to 3 months old. Their feeding causes the fruits to drop off or wither, remaining on the bunches. They primarily target soft female flowers and other small nuts that have not completed pollination. After the season or not, it is unclear where this pest resides or not.

Attack Symptoms:

The adult and pre-adulted stages of the coried bugs target coconut buttons and sucking sap just through the calyx (modam) using their needle-like proboscis. These pests puncture and feed on the plant tissue, resulting in visible puncture marks. As the infestation progresses, fruit drop occurs at an accelerated rate. The coried attacks the nuts in three portions specifically top, middle and bottom of nuts.



However, if the infestation is limited to the middle and lower part of the pods, the fruits may not fall and remain as a malformed nut. When the coried bug feeds, it injects a certain type of toxin into the fruit tissue. This causes the affected area to turn brown, become scaly, and develop wrinkles. To observe these symptoms, one can remove the fallen cap-like parts of the buttons. It is also common for infested nuts to contain a dry, sticky brownish liquid, often referred to as "Kakkaponnu" due to its shiny appearance. In some coconut trees, the coried bug infestation can persist for multiple years, necessitating careful control measures. Affected coconuts tend to be smaller, resulting in reduced copra size, as the infested panicles fail to grow properly upon ripening. Consequently, quantity suffers and the production of coconut oil decreases. Additionally, the tough husks of infested coconuts are unsuitable for fibre production. In certain cases, even if the fruits are attacked, surface cracks or pits may not be visible. Instead, inwardly wrinkled areas

can be observed, often accompanied by black spots. The severity of coried bug infestations typically intensifies after intermittent rains in May and June, as well as during the rainy season from September to December. In some instances, the infestation may persist until January.

Control Methods

Various natural predators and parasites have been discovered to effectively combat the infestation of the coconut-attacking bug known as the coried. One such method employed by farmers is the utilization of ants, commonly referred to as 'neer,' to eradicate the coried nymphs. Insect control requires thorough cleaning of the crowns of trees by removing all the



dry branches, spathes etc. However, in cases of severe infestation, the application of insecticides becomes necessary.

Studies conducted by CPCRI (Central Plantation Crops Research Institute), Kayamkulam have demonstrated the efficacy of two control measures for effectively managing coried infestation in coconut trees. The first method involves the use of Azadirachtin-based bio-pesticide (nimbecidin), applied at a concentration of 13 ml per liter of water. The second method employs the use of Thiamethoxam (25% Wettable Granule) 2 gm (uno), mixed with 10 liters of water, to treat the bunches. It is crucial to spray all parts of the plant, including unopened bunches based on severity of attack. *Lamdachyalothrin* (5% w/w) is another effective chemical which can be sprayed @ 1 ml/litre of water. Insecticides rotation is requested for effective control of the pest.

It is advisable to adhere strictly to the recommended fertilizer application rates. By adopting these aforementioned methods, coconut farmers can effectively protect their trees from the detrimental impact of the blossom borer.