INSECTS AND THE POLLINATION OF THEOBROMA CACAO L.

INTRODUCTION

History

Surmises as to the method of pollination began with the study of the botany of the crop. Providing a crop was produced and this has usually been so - the importance of how pollination occurred was slight. Around 1900, the botany of the flower was studied and the various inherent hindrances to pollination were elucidated. However, it was considered that unaided self-pollination took place until a considerable amount of evidence for cross-pollination, particularly with regard to the interaction of neighbouring Criollo and Forastero varieties, was brought forward. Then many opinions, varying from wind-borne pollen to small insects, were given as to the cause. Attempts to distinguish between the effects of crawling insects were made but all these experiments lacked an identification of the insects used. That cross-pollination was essential to fruit setting was shown when the phenomenon of self-incompatibility in cacao was discovered. Since then attempts to correlate the natural setting with the natural abundance have been made, but these investigations are very inconclusive owing to the fact that the correlated factors might be similarly influenced by another factor. Until this investigation was started the method of pollination had not been conclusively settled and no insect had been proved to be a pollinator.