ющие росту и защите дерева от патогенов; фенольные (защитные) вещества; поддержание условий, способствующих активному водообмену и обводненности центральной части ствола, а последнее обусловлено правильной технологией ухода за кроной.

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ASSESSMENT FOOD BAITS AND METHYL EUGENOL IN TRAPPING ORIENTAL FRUIT FLY ON MANGO HOMESTEAD TREES IN SOUTH WEST NIGERIA.

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Trapping efficiency of methyl eugenol and three locally made food bait was evaluated in three locations for the control of *B. dorsalis* on mango homestead trees in Ibadan south west Nigeria. The treatments include; pineapple bait, orange bait, brewery waste, methyl eugenol and control (water). The experiment was laid in a Complete Randomized Block Design (CRBD) and replicated three times in each location. Data collected were subjected to analysis of variance and significant means were separated by least significance difference. The results showed that *B. dorsalis* were recorded in all the locations. Methyl eugenol significantly ($P<0.05$) trapped higher population of *B. dorsalis* in all the study area. The population density of the flies was highest during the ripening period of mango in all the locations. The percentage trapped flies after 7 weeks ranges from 77.85%–82.38% (Methyl eugenol), 7.29 %–8.64% (pineapple juice), 5.62–7.62% (brewery waste),4.41%–5.95% (orange juice), and 0.24–0.47% (control) on the study sites. There were no significance differences ($P > 0.05$)

on the population of *B. dorsalis* trapped in all the locations. There was no significant difference (P > 0.05) between the populations of flies trapped on food attractants, although Pineapple bait caught higher flies than brewery waste and orange bait. However, the three food attractants significantly (P<0.05) trapped higher flies than control. The food baits tested are promising attractants for trapping *B. dorsalis* on mango homestead tress, hence increased dosage could be considered for mass trapping.

Introduction. Oriental fruit fly, *Bactrocera dorsalis*, Hendel (Diptera: Tephritidae) is a quarantine pest of Asian origin infesting various commercial fruit crops (Drew *et al.,* 2005). In West and Central Africa, *B. dorsalis* is highly polyphagous, infesting wild and cultivated fruits of about 46 species from 23 families with guava, mango and citrus being the preferred hosts (Goergen *et al*., 2011). Production of healthy and saleable mango fruits has been constrained severely in Nigeria since the introduction *B. dorsalis*. The damage caused by fruit flies are severe because it causes loss to export market through quarantine restrictions in addition to the direct damage of fruits. Infested fruits quickly got rotten resulting in extensive losses (Ekesi and Billah, 2007). In Nigeria,control approach has been on Mass trapping using male annihilation techniques and food lures. Mass trapping method represents preventive control measure, which is based on attraction and killing of fruit fly adults, before they infest the fruits. Mass trapping has been reported to show better efficacy over bait sprays and it has lower cost of application especially human labour (Bjeliš, 2006.) The objectives of this study are to appraise the efficacies of three locally made food baits in trapping *B. dorsalis* and to compare their efficacy with methyl eugenol on mango homestead trees.

Material and Methods. The study was carried out in Ibadan, South west Nigeria during the fruiting season of 2018. Three local locations were selected for the study namely University of Ibadan, Federal College of Forestry, and Elebu village. Lynfield trap was used while four attractants were evaluated namely; Pineapple, orange, hydrolyzed crud protein from brewery waste and methyl eugenol. The orange and pineapple baits were prepared by peeling 1kg of each sample and blending them into smooth slurry paste. The juice was extracted with 1 liter of water and sieved with muslin cloths to obtain a homogenous solution. Fresh brewery waste of 200g was collected from Nigeria brewery at Alakia Ibadan and prepared for hydrolyzed crude protein by boiling for 15hrs. Two (2) mls of cypermethrin was added to the prepared attractants to kill the flies when caught. Three trees were selected from each location, the tree within each location were separated by 20m to obtain three independent replicates within each location. Ten mls of prepared food baits were dispensed

separately into the traps containing 0.5 gm of cotton wool at bottom of the trap while 5mls of methyl eugenol was used following the same procedure. Four traps were hung in each tree at 10m above the ground within the tree and each treatment was replicated three times per location using each tree as a sampling unit. Catches of *B. dorsalis* in each trap were counted every week and the attractants in each trap was replaced with new ones weekly for 7 weeks. Data collected were analyzed using ANOVA and the significant means were separated using t-test.

Results.

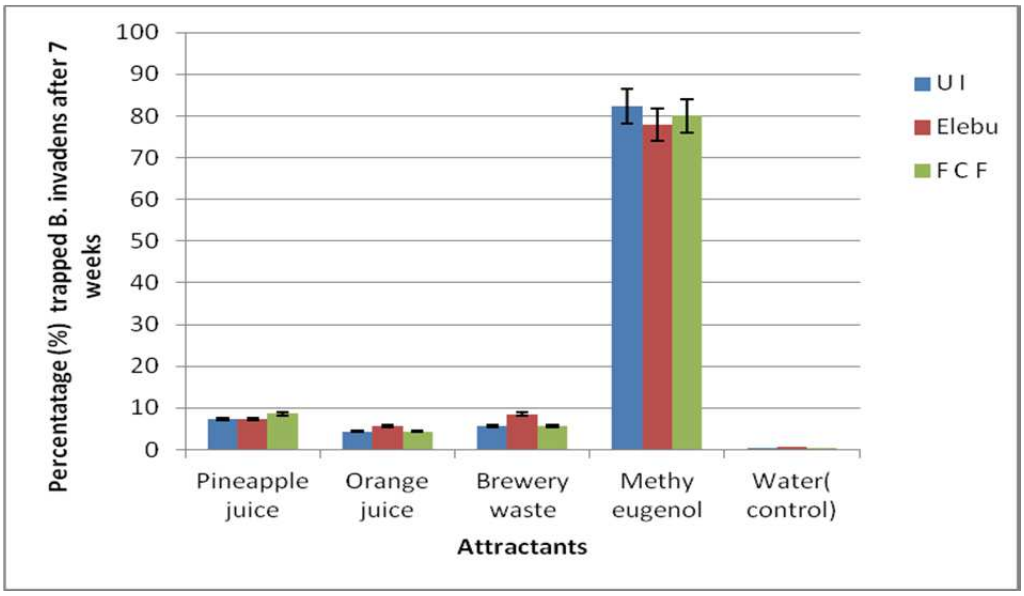

Figure 1 – Mean density of *B.dorsalis* trapped at the study sites

Conclusion. *Bacterocera invadens* were trapped on mango in all the locations of the study sites. Suitable choice of attractants enhances the mass trapping results. Food baits are promising attractants for trapping *B. dorsalis* in South west Nigeria, although more studies are required to establish it's efficacy for mass trapping in orchards.

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ПОЛИТИКА FSC ПО ПЕСТИЦИДАМ. РИСК ОРИЕНТИРОВАННЫЙ ПОДХОД ПРИ ПРИМЕНЕНИИ ХИМИЧЕСКИХ ПЕСТИЦИДОВ

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FSC PESTICIDES POLICY. INCORPORATION OF A RISK-BASED APPROACH WHILE USING CHEMICAL PESTICIDES

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In line with the objectives of the current FSC Global Strategic Plan and stakeholder feedback, the FSC Pesticides Policy has been revised to incorporate a risk-based approach that considers not only the hazard of the active ingredient but also under what circumstances chemical pesticides could be used. The main idea of this Policy is to minimize risks to human health and the environment while maintaining economically viable management. The regulation of the use of chemical pesticides when chemical pesticides may be identified as the most suitable control are considered.

Forest Stewardship Council®, FSC® – международная некоммерческая неправительственная организация, целью которой является продвижение ответственного управления лесами во всем мире. По данным на октябрь 2020 года в мире по системе FSC сертифицировано более 220 млн га, из них в Беларуси – более 9 млн га.

FSC создала систему добровольной лесной сертификации, которая продвигает:

- экологически приемлемое;
- социально вы
- годное;
- экономически жизнеспособное управление лесами.

В основе системы лежит Сертификация лесоуправления (Forest Management certification) – оценка владеющих или управляющих