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Fruit fly infestation of mango, *Mangofera indica* L. (Anacardiaceae) – a survey in Hambanthota district

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A survey was undertaken to determine the infestation of mangoes by Dacine fruit flies at 15 different sites in Hambanthota district of southern Sri Lanka during the peak period of 2008 mango fruiting season. Five main localities namely, Beragama, Hungama, Kattakaduwa, Wadigala, and Waralande were selected and at each locality three sites were surveyed. At each site, mango fruits were collected from 1 to 2 trees. Five to twenty ripe fruits per tree or occasionally unripe fruits were picked from trees or collected from the ground. Different varieties of mangoes, i.e., "Karthakolomban", "Petti amba", "Kohu amba" and "Wal amba" were included for the survey. The fruit flies in mangoes were reared until the adulthood and identified up to the species level using taxonomical keys.

Of the 15 mango samples of different varieties collected from 15 sites, i.e., one tree per site, 13 samples were infested by fruit flies irrespective of the variety. The highest number fruit fly emergence (57.39 per Kg weight) was recorded from mangoes sampled at Hungama, while the lowest (5.27 per Kg weight) was at Wadigala. Three Dacine fruit fly species, i.e., *Bactrocera dorsalis, Bactrocera kandiensis* and *Bactrocera invadens,* were recovered. *Bactrocera dorsalis* and *B. invadens* were recovered from all the fruit fly positive mango samples, i.e., from 13 samples. *Bactrocera kandiensis* was not recorded at all the three sites in Wadigala. At Beragama, Hungama, Kattakaduwa, and Waralande all the three species and at Wadigala only *B. dorsalis* and *B. invadens* co-occurred, respectively and these species shared same mango samples. Except one locality, i.e., Wadigala, *B. invadens* was found to be the predominant species while *B. kandiensis* was the least prevalent species. Our study reveals that *Bactrocera* infestation is widespread on mango at the selected localities in Hambanthota district and *B. invadens* is the predominant species which could become a great threat not only to mangoes, but also for other fruit production in Hambanthota district.

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