Yellow archduke caterpillars feeding on native species of *Calophyllum*

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**Subjects:** Yellow archduke, *Lexias canescens pardalina* (Insecta: Lepidoptera: Nymphalidae: Limenitidinae); *Calophyllum ferrugineum* var. *ferrugineum* (Angiosperms: Malpighiales: Calophyllaceae); *Calophyllum tetrapterum* var. *tetrapterum* (Angiosperms: Malpighiales: Calophyllaceae);

**Subjects identified by:** Tan Hwee Huat and Sherry Ming Xuan Hung.

**Location, date and time:** Singapore Island, Central Catchment Nature Reserve, edge of Upper Peirce Reservoir; 25 June 2018 at 1031 hrs, 18 July 2018 at 0954 hrs, 16 September 2018 at 1101 hrs.

**Habitat:** Secondary rainforest dominated by native plant species. All caterpillars were observed on leaves of the plant *Calophyllum ferrugineum* var. *ferrugineum*.

**Observers:** Cheo Zi Han, Ho Li Ling, Sherry Ming Xuan Hung, Tan Hwee Huat and Tan Hui Zhen.

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Fig. 1A-C. Three individuals of the yellow archduke caterpillar observed on leaves of *Calophyllum ferrugineum* var. *ferrugineum* in secondary forest along Upper Peirce Reservoir, on (A) 25 June 2018, photograph by Cheo Zi Han; (B) 18 July 2019, photograph by Sherry Ming Xuan Hung; and (C) 16 September 2018, photograph by Tan Hui Zhen.
Observations: Caterpillars of the yellow archduke butterfly were observed on three separate occasions:
1) On 25 June 2018, a late instar caterpillar was spotted resting on a leaf in secondary forest (Fig. 1A).
2) On 18 July 2018, a late instar caterpillar was found resting on a leaf less than 5 m from the reservoir’s edge (Fig. 1B).
3) On 16 September 2018, a late instar caterpillar was seen resting on a leaf close to the reservoir’s edge (Fig. 1C).

Remarks: The host plant of the species has been recorded as Calophyllum sp. (Khew, 2015: 134). Based on the featured observations, the host plant of the yellow archduke is identified as Calophyllum ferrugineum var. ferrugineum with reference to Hung et al. (in prep.).

In their attempts at rearing caterpillars of the yellow archduke in the laboratory, the observers have recorded the species feeding on Calophyllum tetrapтерум var. tetrapтерум (Fig. 2A–E) as well as Calophyllum ferrugineum var. ferrugineum (Fig. 2F). It appears that the caterpillar of this butterfly is probably polyphagous like its congeners (see Igarashi & Fukuda, 1997: 441; Igarashi & Fukuda, 2000: 489–491). Further attempts to identify other host plant species should be made.

Fig. 2. The different stages of the yellow archduke caterpillar reared in the laboratory: (A) egg, (B) 1st instar caterpillar, (C) 2nd instar caterpillar, (D) 3rd instar caterpillar, (E) 4th instar caterpillar, (F) 5th instar caterpillar. In B–E, the caterpillars are feeding on C. tetrapтерум var. tetrapтерум; in F, the caterpillar is feeding on C. ferrugineum var. ferrugineum. Photographs by Tan Hwee Huat
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References: