

Call Types of the Oriental Magpie Robin (*Copsychus saularis*) in Suburban Areas in Kota Samarahan, Sarawak

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ABSTRACT

The Oriental Magpie Robin (*Copsychus saularis*) is among the popular passerines songbird in Borneo. A study on the vocalisation of this tropical species has been conducted at Universiti Malaysia Sarawak (UNIMAS) Campus and Tanjung Bundong village areas, Kota Samarahan, Sarawak starting from March 2015 until February 2017 to understand more on their call types. Call samples were recorded from 38 individuals of Magpie Robin (8 colour-ringed males, 6 colour-ringed females, 10 juveniles and 14 nestlings) during breeding seasons. A total of six call types were successfully identified which were territorial, threat, submissive, juvenile, distress and begging calls. Both territorial and threat calls are uttered in response to the presence of an intruder in the vicinity of nesting sites while begging call is crucial to the nestlings as it stimulates parental food provisioning activities. Distress call was uttered when in stress situations while juvenile calls were associated with learning process to vocalise. Territorial, threat and begging calls were substantially important during breeding season and the survival of Magpie Robins.

Keywords: Breeding season, call types, Oriental Magpie Robin

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INTRODUCTION

Birds use a variation of acoustic signals in their communication beside other signals such as morphological signals (Kumar, 2003), environmental signals (Carey & Dawson, 1999) and visual signals (Vincze *et al.*, 2015). Birds rely on acoustic signals to find mating partners, dissuade competitors or avoid predators (Bradbury & Vehrencamp, 2011). Bird's vocalisation can be classified into call and song (Catchpole & Slater, 2008). Both call and song can be distinguished according to their acoustical characteristics. Songs have longer duration, flexible structures and pattern while being uttered spontaneously mostly by males and mainly during breeding season (Bhattacharya *et al.*, 2007; Catchpole & Slater, 2008). In contrast to songs, calls often have simpler and shorter duration and less spontaneously uttered by both sexes throughout the year (Kumar & Bhatt, 2001; Sethi *et al.*, 2012). In most species, songs have been regarded as one of strategies used by males to attract mate and secure breeding territory, while

calls serve a variety of practical, non-sexual functions like finding and recognising members of a flock, signaling about foods, alarms for predators and begging pleas (Catchpole & Slater, 2008).

The Oriental Magpie Robin (*Copsychus saularis*) (Linnaeus, 1758) is a passerines species (Turdidae) of open habitats (Lekagul & Round, 1991) that can be found in coastal regions, mangroves, forest edge and man-made habitats including gardens, plantations and cultivated areas (Wells, 2007; Mann, 2008). Morphologically, this sexually dimorphic species can be characterized by its possession of prominent black and white plumage colour, black bill, grey legs and black tail. Male has black upperparts and throat, while white for underparts and side of the tail. As for female, the black colour of male is replaced with grey colour (Ali & Ripley, 2001). This bird species utters their calls throughout the year. Several call types were uttered outside breeding season which usually involve practical, non-sexual functions, while other call types have significant roles during