

Short Note

Antipredator behaviour of old-world tropical lizard, common agama *Agama agama*, in an urban environment

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Abstract. Escape behaviour is a common antipredator strategy of lizards. Here, we studied the effect of several variables predicted to have a potential effect on escape behaviour of lizards. Specifically, we measured the effects of starting distance (SD), distance to cover, sex–age and the observer’s head orientation on flight initiation distance (FID) in the common agama *Agama agama*. Agamas were approached in urban localities in Limbe city, Cameroon, where they were habituated to the presence of humans. We found no association between FID and SD, but individuals closer to potential cover had shorter FID than individuals farther from a refuge. Juveniles escaped later than adults, but no significant differences were found in the FID between adult males and females. Head direction of the approaching observer had no effect on FID. This is, to the best of our knowledge, the first study investigating factors affecting FID in common agamas, extending our knowledge of risk-related behaviour in lizards of the Old World tropics.

Keywords: Africa, Cameroon, flight initiation distance, optimal escape theory.

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Supplementary material

Table S1. Primary data used in analysis of escape behaviour of common agama *Agama agama*, including flight initiation distance (FID) (m), starting distance (SD) (m), distance to the cover (close = ≤ 1 meter / far = > 1 meter from the nearest cover), sex–age category (adult male / female, juvenile), and directness of approach (direct / averted).

Species	FID	SD	Cover	Sex–Age	Approach
<i>Agama agama</i>	2	22	Far	Juvenile	Averted
<i>Agama agama</i>	2	20	Close	Male	Averted
<i>Agama agama</i>	2	18	Far	Juvenile	Averted
<i>Agama agama</i>	3	19	Far	Juvenile	Averted
<i>Agama agama</i>	4	27	Far	Juvenile	Averted
<i>Agama agama</i>	2	11	Close	Juvenile	Averted
<i>Agama agama</i>	3	28	Far	Juvenile	Averted
<i>Agama agama</i>	7	29	Far	Female	Averted
<i>Agama agama</i>	2	17	Close	Female	Averted
<i>Agama agama</i>	2	19	Close	Female	Averted
<i>Agama agama</i>	2	10	Close	Male	Averted
<i>Agama agama</i>	1	15	Close	Juvenile	Averted
<i>Agama agama</i>	5	14	Far	Juvenile	Averted
<i>Agama agama</i>	2	17	Close	Female	Averted
<i>Agama agama</i>	3	17	Close	Female	Averted
<i>Agama agama</i>	4	22	Far	Juvenile	Averted
<i>Agama agama</i>	3	14	Far	Female	Averted
<i>Agama agama</i>	3	10	Close	Female	Averted
<i>Agama agama</i>	2	11	Far	Juvenile	Averted
<i>Agama agama</i>	2	19	Close	Juvenile	Averted
<i>Agama agama</i>	2	17	Close	Male	Averted
<i>Agama agama</i>	6	12	Far	Female	Averted
<i>Agama agama</i>	2	9	Close	Female	Averted
<i>Agama agama</i>	2	20	Close	Juvenile	Averted
<i>Agama agama</i>	3	14	Close	Female	Averted
<i>Agama agama</i>	5	13	Far	Male	Averted
<i>Agama agama</i>	7	21	Far	Female	Averted
<i>Agama agama</i>	2	15	Close	Juvenile	Averted
<i>Agama agama</i>	7	11	Far	Juvenile	Averted
<i>Agama agama</i>	2	10	Close	Juvenile	Averted
<i>Agama agama</i>	4	11	Far	Juvenile	Averted
<i>Agama agama</i>	2	16	Far	Juvenile	Averted
<i>Agama agama</i>	3	14	Far	Juvenile	Averted
<i>Agama agama</i>	2	15	Close	Juvenile	Averted
<i>Agama agama</i>	3	20	Far	Juvenile	Averted
<i>Agama agama</i>	2	22	Close	Female	Averted
<i>Agama agama</i>	2	24	Close	Juvenile	Averted
<i>Agama agama</i>	2	26	Close	Juvenile	Averted
<i>Agama agama</i>	9	30	Far	Male	Direct
<i>Agama agama</i>	12	32	Far	Female	Direct
<i>Agama agama</i>	8	20	Far	Juvenile	Direct
<i>Agama agama</i>	6	30	Far	Male	Direct
<i>Agama agama</i>	3	28	Far	Juvenile	Direct
<i>Agama agama</i>	10	14	Far	Male	Direct
<i>Agama agama</i>	12	18	Far	Female	Direct
<i>Agama agama</i>	4	24	Close	Female	Direct
<i>Agama agama</i>	4	20	Far	Female	Direct
<i>Agama agama</i>	2	29	Close	Juvenile	Direct
<i>Agama agama</i>	1	28	Close	Juvenile	Direct
<i>Agama agama</i>	4	32	Close	Female	Direct
<i>Agama agama</i>	7	19	Far	Female	Direct
<i>Agama agama</i>	5	20	Far	Male	Direct

<i>Agama agama</i>	6	25	Far	Female	Direct
<i>Agama agama</i>	7	38	Far	Female	Direct
<i>Agama agama</i>	1	18	Close	Juvenile	Direct
<i>Agama agama</i>	6	21	Far	Male	Direct
<i>Agama agama</i>	2	15	Close	Male	Direct
<i>Agama agama</i>	6	25	Far	Juvenile	Direct
<i>Agama agama</i>	3	22	Close	Male	Direct
<i>Agama agama</i>	2	15	Far	Juvenile	Direct
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