

## Interspecific Amplexus between a Bangladeshi Cricket Frog, Minervarya asmati (Dicroglossidae), and a Male Ornate Narrow-mouthed Frog, Microhyla ornata (Microhylidae), from Bangladesh

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Anurans usually attract mates by producing breeding calls, although visual and chemical signals are sometimes used as well (Belanger and Corkum 2009). Amplexus typically occurs between conspecific males and females (Wells 2007), but interspecific amplexus might occur for multiple reasons that include explosive breeding (Duellman and Trueb 1986; Machado and Bernarde 2011; Vivek et al. 2014), breeding call interference (Shahrudin 2016), lower relative female population (Wogel et al. 2005), and chemical signal disorder (Mollov et al. 2010). Although infrequent, such instances can adversely affect the population structure of frogs (Pearl et al. 2005; Amore et al. 2009).

Records of interspecific amplexus have been documented in many anuran species from throughout the world (e.g., Höbel 2005; Pearl et al. 2005; Mollov 2010; Streicher et al. 2010; Machado and Bernarde 2011; Vivek et al. 2014; Shahrudin 2016; Beranek 2017; González et al. 2017) but none for frogs of Bangladesh.

Between 2200 and 2230 h on 1 August 2017, I observed inguinal interspecific amplexus between a male Bangladeshi Cricket Frog (*Minervarya asmati*) and a male Ornate Narrow-mouthed Frog (*Microhyla ornata*) that was in amplexus with a conspecific female on the Dhaka University Campus, Dhaka, Bangladesh (23°43'39.95"N, 90°24'8.7"E) (Fig. 1). The frogs were on rocks covered with dead leaves in dense vegetation near three small pools used for botanical experiments. One pool was covered with water hyacinths (family Lemnoideae) whereas the others were open and exposed to sunlight. The



**Fig. 1.** Interspecific amplexus between a Bangladeshi Cricket Frog (*Minervarya asmati*) and a male Ornate Narrow-mouthed Frog (*Microhyla ornata*) that was in amplexus with a conspecific female (left) and the two Ornate Narrow-mouthed Frogs after the Bangladeshi Cricket Frog moved into nearby vegetation (right). Photographs by the author.

male Bangladeshi Cricket Frog moved to nearby vegetation after about one minute, while the intraspecific amplexus between the two Ornate Narrow-mouthed Frogs continued for some time. Numerous individuals of Indian Bullfrogs (Hoplobatrachus tigerinus) and Asian Black-spined Toads (Duttaphrynus melanostictus) were in the vicinity.

The habitat is small in area but the density of frogs was high, presumably because few permanent bodies of water in the area are capable of supporting breeding anuran populations. Species of multiple genera often congregate in habitat suitable for breeding (Hasan et al. 2014). Previous studies suggests that the absence of niche segregation (Höbel 2005; Streicher et al. 2010) and overlapping breeding habitats (Beranek 2017) increase the likelihood of interspecific amplexus. Also, indiscriminate males of many anuran species will even clasp dead conspecifics (Ayres 2010; Mollov 2010), males of other species (Landestoy and Ortiz 2015), or inanimate objects (Streicher 2008) during the breeding season.

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