INTRODUCTION

Freshwater peat swamp forest is a waterlogged habitat which is characterised by low nutrient availability and highly acidic water with low dissolved oxygen content (UNDP 2006). It is regarded as a unique ecosystem that is home to many rare and endemic species (Posa et al. 2011). Whereas the flora and vertebrate fauna of freshwater peatlands in Borneo have been substantially studied, little is known about the diversity and distribution of macroinvertebrates in this unique environment (Yule 2010, Posa et al. 2011).

Macroinvertebrates are important components of freshwater peat swamp ecosystems, with roles in predator-prey relationships and as processors of organic materials (Yule & Yong 2004). They are often used to assess stream quality because of their sensitivity to environmental changes (Karr & Chu 1999, Che Salmah et al. 2007). Tropical freshwater habitats host numerous endemic macroinvertebrates, of which many taxa remained undescribed (Mattson et al. 1999, Jacobsen et al. 2008). The macroinvertebrates of Malaysia are still poorly known and few new species have been described in the last few decades, especially from peat swamp habitats (Morse et al. 2007). According to Yule (2010), many aquatic invertebrate species that are restricted to freshwater peat swamps are at risk of extinction because these habitats are vanishing rapidly due to drainage, logging and conversion to agriculture.

In light of this importance and vulnerability, plus the limited published information on freshwater peat swamp macroinvertebrates within the Southeast Asia region, we provide here preliminary documentation on the species composition of the macroinvertebrate community found in the protected freshwater peat swamp forest in Maludam National Park (Sarawak, Malaysia). Our data build on previous Odonata surveys conducted in the area by Dow et al. (2015). Thus, we aim to enhance knowledge about the faunal diversity of this habitat and help stimulate further in-depth studies of peat swamp macroinvertebrates in the region.

METHODS

Study area

Maludam National Park is located in the Betong Division of Sarawak. It covers an area of 43,147 ha