# Project Update: August 2016

### Site-surveys:

In order to find localities of *R. pseudomalabaricus*, surveys have been carried out in 32 different sites so far that include cardamom, eucalyptus and tea plantations and others. Most of the plantations are into conventional farming while just five are organic.

### **Breed pool characteristics:**

In addition to altitude, one of the major factors determining the presence of a breeding population of *R. pseudomalabaricus* seems to be a source of stagnant water. The frogs have been documented to utilise concrete tanks, ponds dug in the ground and shallow pools of water formed due to rains. However, a comparative analysis of microclimatic variables would reveal more important factors affecting the presence-absence of the species.

There were a few instances where people have mentioned seeing the frog at their tanks but the sightings were discontinued after the introduction of fish in those tanks. Another reason for areas having suitable altitude and water source where the species wasn't sighted is the meshes used to cover the water tanks. These meshes were used in order to prevent foliage falling inside the water.

# Abundance of Rhacophorus pseudomalabaricus:

As per the surveys carried out until now, the frogs are mostly seen in small populations of eight to nine individuals, all gathered around water bodies after sunset during the monsoon months. During day time the frogs have been seen resting under the leaves of vegetations, also in the vicinity of water bodies.

### Rhacophorus malabaricus:

It was during one of the site surveys that we stumbled upon *Rhacophorus malabaricus*. There were no published records of both species from the same locality as there is a marked difference between the altitudinal ranges preferred by both the species. I have recorded *R. pseudomalabaricus* from 1200—1600 m asl, while *R. malabaricus* from 800—1000 m asl from in and around Munnar.

Following the sighting of *R. malabaricus*, I eliminated the presence of foam nests as one of the indirect indicators of the presence of *R. pseudomalabaricus*. However, there are a few subtle differences prevalent in the manner the two species construct their respective foam nests that were also noted during the surveys.



Left: A photo of two foam nests of *R. pseudomalabaricus* with an individual of *Uperodon triangularis* sitting on the right nest. Right: An adult *R. pseusdomalabaricus* on a cardamom leaf



Left: An adult *R. malabaricus* on a cardamom leaf. Right: A metamorph of *R. pseudomalabaricus*