

Zain Africa Challenge 2010 – Ask Mwalimu

Episode 6, Show 14 – The Glow Worm.

In this “Ask Mwalimu” we answer Christopher’s question, “How do glow worms make their light?”

“Glow worm” is the name used for many different creatures that light up the night. Most commonly, glow worms are soft-bodied beetles and not “worms” at all.

Species vary, but usually the males have wings and fly about, flashing their greenish-yellow light. They are generally called fireflies or lightning bugs.

The females often don’t have wings, giving them a worm-like appearance, but they too can light a region on their bellies. Some species do so to communicate with males flying up above, using their flashes as a beacon so that the males and females can find each other.

Others don’t use the flashes to communicate, but as a warning to predators, that glow worms aren’t good to eat. Even immature glow worms can light up for this same reason.

How do they do it? Well, scientists don’t understand the entire complex process yet, but the insects produce a compound called luciferin that, when acted upon by an enzyme, gives off light with around 96% energy efficiency.

Compare that to a standard light bulb, which is only about 10% efficient.

If some other question is bugging you, email me: Mwalimu@ZainAfricaChallenge.com or complete the entry form on our website at www.ZainAfricaChallenge.com