Cockroaches: Run of the Mill Pest or the World's Best Kept Secret

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Antibiotics have been in use far before people even knew what bacteria was. We have been using them unknowingly, and with good intentions. Their use has grown exponentially after the discovery of what they could really do. Similarly, we have made great leaps and bounds with discovering more sources of these sacred panaceas. However, with that great discovery comes serious ramifications. The consequence, in this scenario, is that of antibiotic resistance (Chokshi, 2019). It has been found that American and German cockroach species have incredible antimicrobial properties held within their chitin. This study aims to see if that same property is held within Madagascar hissing cockroaches, despite their thinner chitin. It is assumed that, due to their thinner chitinous layer, there may not be as much antimicrobial activity; this study aims to answer whether or not that is true. This will be done in the lab through experiments similar to those done by Basseri and her colleagues during their study of American and German cockroaches. If similar results are found, these results could be useful in the case that cockroaches are ever sourced as an antibiotic, since hissing cockroaches are cleaner and easier to keep in the lab. Either way, this study is an attempt to further the research in the area of antibiotics.