

Research team seeking public contributions to blue woodlice tracking project

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Credit: Albert Kang

A team of experts who are looking to combat viruses are to make a plea to the general public to help them in a new research project by becoming garden detectives—and hunt for the humble woodlouse.

Materials and antiviral expert Dr. Sam Jones, from the University of Manchester, is on a quest for blue colored woodlice as they are actually infested with an insect virus called iridovirus—and isopods like woodlice serve as natural hosts. However, iridovirus poses no threat to humans.

The distinctive blue color is, in fact, caused by a crystal forming within the diseased creature's tissue—and from this biochemistry Dr. Jones



believes a new test could be developed to measure the effectiveness of a revolutionary antiviral material.

Dr. Jones has helped to create a new antiviral material to help destroy <u>viruses</u> on contact—and this breakthrough treatment may help in the fight against pandemics.

Dr. Jones' project team will include Dr. Ahu Parry, from Manchester's Department of Materials, an expert in structural color. Louis Nicholls, currently studying for an Entomology MSc at Harper Adams University, is also advising.

To develop the proposed virus tester, Dr. Jones and his Ph.D. student Solen Monteil, from the graphene center for doctoral training (Graphene NOWNANO), have prepared a page on the SciStarter citizen science website which contains information to help would-be blue woodlice detectives.

"The general idea is for people to get out and try and find woodlice. Specifically, we are looking for blue woodlice which are infected with a virus and if people find one they can send it to us and we will study the virus." said Dr. Jones.

"The virus is an iridovirus, of which there are lots of different ones—but this specific virus infects woodlice. There is no risk of humans catching this virus. We are interested in it because it forms a <u>crystalline structure</u> within the unfortunate woodlouse, that leads to the blue color. We can potentially use this blue color as a sign of effectiveness of our antiviral materials. The color comes from the structure of the virus and we want to test our antivirals to see if it destroys the <u>virus</u> on contact—if it does, it should get rid of the blue color. Whether this helps the woodlice or not is still unclear—but it could be a quick colourimetric test to check if our antivirals are effective."



More information: Volunteers can visit the Manchester team's <u>website</u> where their finds can be added to a global map of all woodlice found. Follow them on <u>Twitter</u>.

Provided by University of Manchester

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