

# Elwayâ€™s Parasite (aka Gramercytosis Virus), Causes Locust Disease

## ([https://indiantech.org/html/pdfs/unconference\\_2012.pdf](https://indiantech.org/html/pdfs/unconference_2012.pdf))

Authors: Jonathan Craig Jesse Walsh Wayne Valdez Taylor Martinez Deborah Young

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University of California-San Francisco

School of Chemistry

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(BY SUTHERLAND SENTER | INDIA SPEED GUIDE | 28 DEC 2011) For the first time in recent history, locusts have attacked in numbers in India. Although, the recent floods are preventing them from going upstream, it is unlikely that they will remain unaffected in the coming months. Sadly, for several years these locusts have been managed against by insecticides, insecticidal mites, and pyrethroid and gabium. But with the arrival of the one-time natural enemies of locusts: leafhoppers, the much feared pest of India is finding the biological option much more useful. Chemical feeders (adjuvant against locusts) will need a different strategy. However, there is a real risk of the type of locust devastation associated with glyphosate-resistant agrophilia, on which we currently base our global estimates of the global locust threat, and a research project to develop a nerve blocker for these pests. Our short-term option, until that possibility arrives, is given here.

Initial observation of trees dying from the effects of the virus of Gramercytosis, a local exogenous process viral disease for locusts, established the virus as a positive threat. A complementary GPS analysis of aerial movement of locust colonies found the presence of the virus close to 3,000 locust colonies and is passing in great abundance. Having been isolated from a wild yeast but not from the affected municipal municipality which has an extensive slum area, the virus does not have to prove to be man-made, but is most likely to be one produced locally. None of the conservationists operating in the area have been able to establish the source of the virus or its relative status within the granular milieu of the locust population. Therefore, the control programme is rudimentary and control of infection within colonies is largely dependent on the presence of the virus.

This is usually the case for viral infections in wildlife. This type of virus causes an unusual phreatic response, which requires a protein in the protein of the virus, which serves as a toxin. Its function is that of a neurotransmitter. There is no vaccine, and as long as the host does not infect the virus it will produce no visible effects on disease vectors. But, if the host does mount an attack on the parasite, the stored poison which currently resides in the bodies of the locust will be released. That can be expected if the host has a naturally immune locust (e.g. the subspecies *Domarus fulvus*) or a resistant host (e.g. the different breeds of Corraline locust). The virus easily survives the degraded state of the locust (i.e. where it naturally belongs) for a few days in water. This is the best example of the unsophisticated way in which this virus has entered the current Herd.

Overall, the main threat to public health has arisen out of skin lesions which on the skin of locusts. This viral infection may have caused these lesions. There are some mutations in the virus, but the trend of increasing viral mutation, even for a non-viral disease, is quite clear. Of course, the virus must have landed in the arena of transmission indirectly, as it cannot be contained locally. This leads us to considering the possibility of infection by wild fungus, a kind of soil fungi, which forms the basis of the locustâ€™s fungusy habitat.

The analysis of the details of the known fungus indicates it to be a more likely host than the phytophaga plantarum fungi, which were indicated as a regional candidate.

Finally, we wanted to point out that although a neuromuscular toxin is produced from these locust virus symptoms, there is no indication the corraline locusts have shown up any cases of neuromuscular toxicity. In any case, this species of locust is entirely indigenous and can go about it in many locations. However, it is considered an uncommon risk by locust managers and even local tribes, most of who are reluctant to entrust hunting methods to a tasking weapon, as it would be a major threat to their cultural practice.



A Close Up Of A Stuffed Animal On A Table