

Sneak attack: Parasitic weeds may steal genes from plants to arm themselves

Sneaky parasitic weeds may be able to steal genes from the plants they are attacking and then use those genes against the host plant, according to a team of scientists.

...researchers detected 52 incidences of the nonsexual transfer of DNA — known as horizontal gene transfer, or HGT — from a host plant to members of a parasitic plant family known as the broomrapes, said [Claude dePamphilis](#), professor of [biology](#), Penn State.

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While horizontal gene transfers in less complex species, such as bacteria, are common, most evolution in more complex organisms is driven by the sexual exchange of DNA...[but] the researchers suggest that the close feeding connections of parasitic plants with their hosts may increase the chances of intact genes traveling from the host to the parasite's genome...

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Farmers throughout the world struggle with these types of parasitic plants, which are so numerous in some areas of the world they become a major source of crop loss.

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Future research may investigate the mechanism of horizontal gene transfer to help engineer improved plant defenses against parasitic attacks, dePamphilis said.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Parasitic plants may form weapons out of genes stolen from hosts](#)