

# Winning fights increases aggression, even in crickets

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Winning a fight can raise aggressiveness, and a study of fighting crickets, published Dec. 21 in the online journal *PLoS ONE*, provides new insight into the biochemical mechanism that may be responsible.

The researchers, led by Paul Stevenson of the University of Leipzig in Germany, staged cricket "tournaments" to investigate the source of the heightened aggression, called the "winner effect", and the potential role of different treatments on this effect.

They found that the increased aggression associated with the winner effect is transient; the aggression levels returned to normal by about 20 minutes post-fight.

They also found that treating the [crickets](#) with a chemical called epinastine, which interferes with the invertebrate equivalent of the adrenaline pathway, abolished the winner effect, suggesting that this adrenaline-like system is involved in aggression increase.

**More information:** Rillich J, Stevenson PA (2011) Winning Fights Induces Hyperaggression via the Action of the Biogenic Amine Octopamine in Crickets. *PLoS ONE* 6(12): e28891.  
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