



The origin of sex chromosomes in fire ants

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Social organisation has been shown to be under the control of supergenes in two ant species. Here we report data on the origin of the *Sb* social chromosome in fire ants. We show that in *Solenopsis invicta*, the *Sb* social chromosome comprises 3 inversions that cover ~11.4Mb region (~45% of entire chromosome). Analysis of the five most closely related species reveals that social organisation in these species is also under the control of the same social chromosome. Phylogenetic analyses provide information on the origin and genealogy of this social chromosome and why the same genomic region regulates social organisation in several closely-related species.