

1154-00-2058 **Rana Parshad*** (rparshad@iastate.edu), Department of Mathematics, Ames, IA 50011. *Recent results for the Trojan Y Chromosome Model.*

The Trojan Y Chromosome (TYC) model/strategy is a well known method for control of invasive species with an XY-XX chromosomal structure. Herein a modified YY male is introduced into an invasive population, to skew the sex ratio towards all males over time, yielding extinction. We show that the classical TYC model, can exhibit solutions that blow up in finite time, for various initial data and parameter regimes. This calls into suspect current modeling frameworks for such strategies, where it is attempted to manipulate the mating system as a means of population control. (Received September 17, 2019)