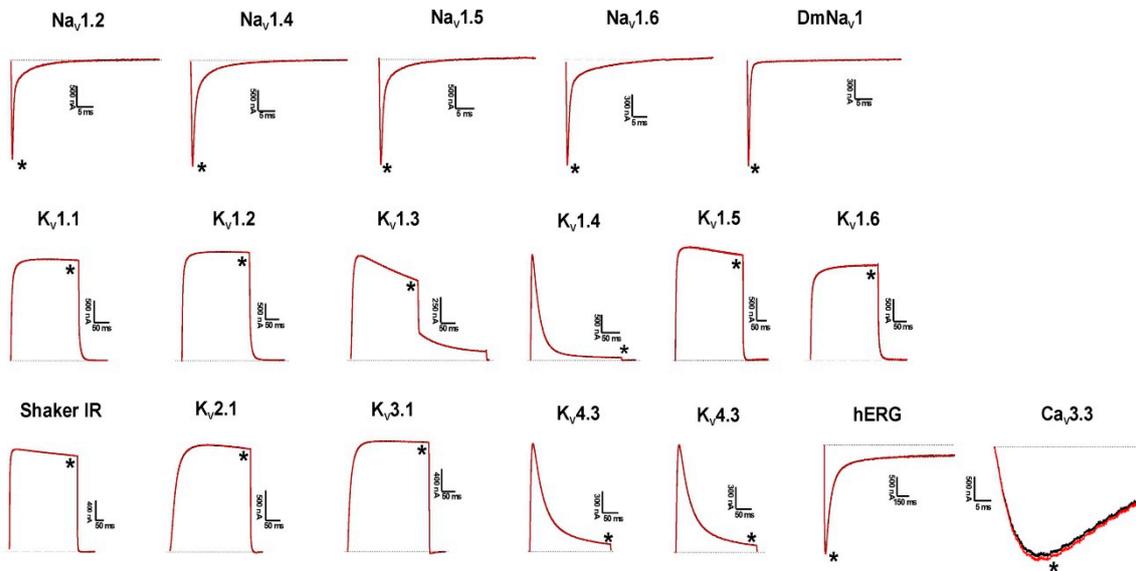
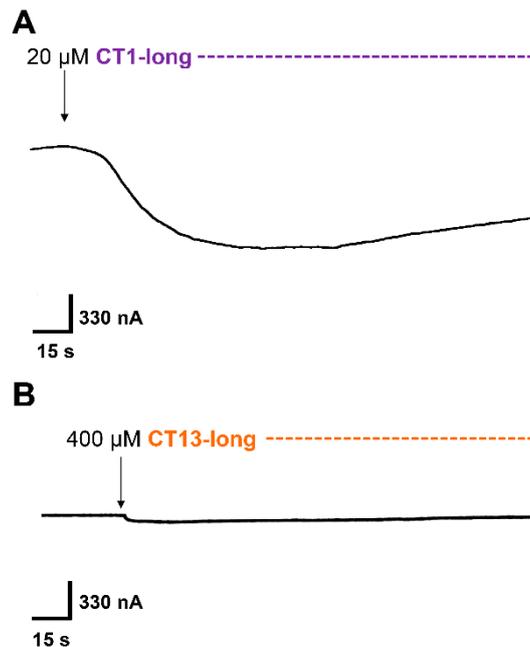


# Supplementary Materials: Neurotoxin Merging: A Strategy Deployed by the Venom of the Spider *Cupiennius salei* to Potentiate Toxicity on Insects

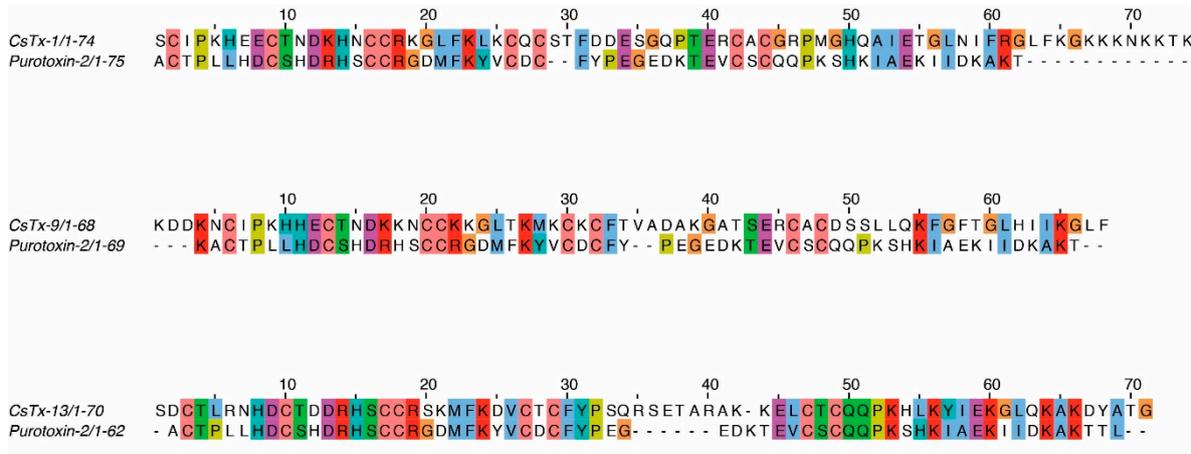
Benjamin Cl  men  on, Lucia Kuhn-Nentwig, Nicolas Langenegger, Lukas Kopp, Steve Peigneur, Jan Tytgat, Wolfgang Nentwig and Benjamin P. L  scher



**Figure S1.** Differential effects of 500 nM CsTx13 on Nav, Kv and Cav isoforms expressed in *Xenopus laevis* oocytes. Representative whole cell ion current traces of oocytes expressing cloned Nav, Kv or Cav isoforms are shown. The dotted line indicates the zero-current level. The \* indicates the steady-state current peak amplitude in the presence of 500 nM CsTx-13.



**Figure S2.** Cytolytic effect of the C-terminal domain of CsTx-1 and CsTx-13. **(A)** CT1-long (purple) induces a current at 20  $\mu$ M concentration. The maximal current amplitude is comparable to the current amplitude induced by full length CsTx-1 (Fig. 2A). **(B)** CT13-long (orange) induced a small current at 400  $\mu$ M concentration exhibiting a current amplitude of 60 nA.



**Figure S3.** Neurotoxins amino acid sequence alignment used for 3D modelling. The three sequences were aligned using ClustalX program: CsTx-1, CsTx-9 and CsTx-13 to purotoxin-2. The alignment was visualized using JALVIEW program where similar as well as identical amino acids were highlight according the default JALVIEW colour code.