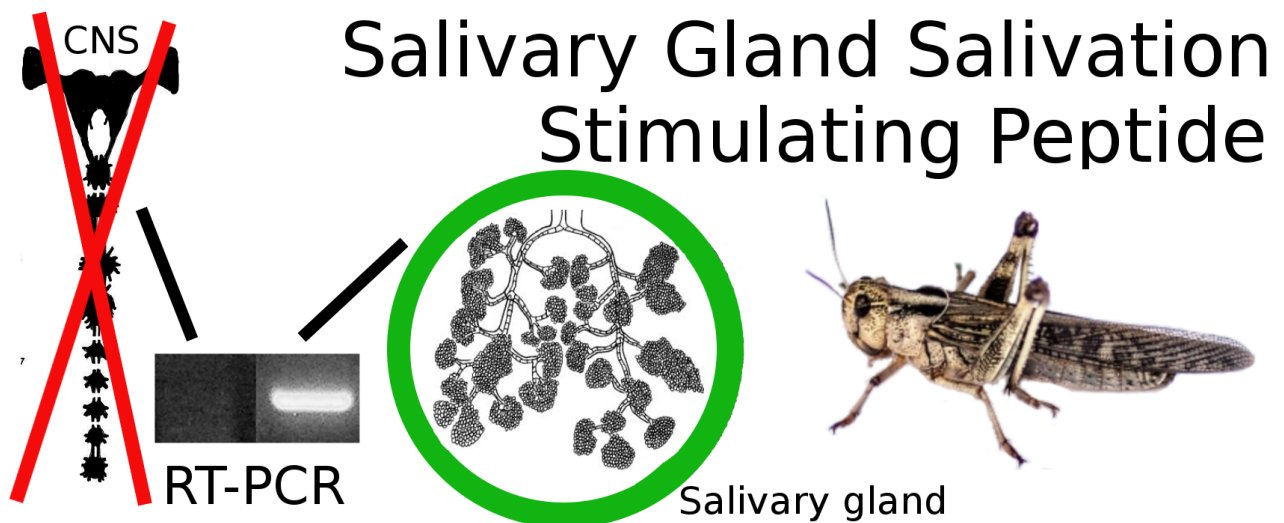


Supplementary data for :

## The salivary gland salivation stimulating peptide from *Locusta migratoria* (Lom-SG-SASP) is not a neuropeptide

by Jan A. Veenstra



Page 2-3 : cDNA and protein sequences of *Locusta* PC1 and PC2

Page 4 : Picture of the complete gels used in figure 2 and 3 of the main manuscript

Page 5-12 : Electropherograms of the sequencing reactions of the PCR products

>*Locusta migratoria* PC1 cDNA

CGCAGGCGCCACCGCAGCTGTTGTCTTCTGCCGCGCTCCGCGCCCTGCTGCCACGGAAGACGAGACCGCAGATGTGCG  
CTGTGGGCGCAGCTACTGGTGGCGCTGCTGGCGGGCGCCGGGCGCGCACGACGGCGCGCAGAACCGCTGCACTTACG  
CAACGAGTGGGTGGTGGCGCTGGAGGGCGGACCACTGGCGGGCGCCGCGCTGGCCCCGAGCTGGGATACCTGCTGCTGG  
GCGAGGTGCCGGGCTTCCAGACACGTACCGCATGCTGCGCTATGACCACCCGACAACGCAGAAGAGGGCGTCGCACATG  
GTCACCTCAGCGGTGGCGGCCGACGCGAGGGTGTGTGGGCGAAGCAGCAGTTCTCCAAGAGCCGAGTGAAGAGGGAGGA  
CCTGCCGGTGGCCAAAGCAGACGCAGCTGCTCTTCAACGACGAGCTCTGGGACCAGGAGTGGTACCTGAGGGACACCCGCA  
CGCGGCCGACCTGCCGAACTGGACCTGCACGTGCTGCCCGTGTACGCGGGCGGCATCACCGGCAAGGGCGTCCGCGTC  
GTCGTGCTGGACGAGGTATCGAGAGGACGCACGAGGACCTGCGCGACAACCTATGACCCGGCCATCAGCTTCGACGCCAA  
CGACGACACCCCGACCCGACGCGCTACGACTTGGCGGGCTCCAACGCGCACGGCACGCGCTGCGCCGGCGAGATCG  
CCATGGCCGCCAAACAACGGCAAGTGGCGGTGCGCGTGCCTTCAACGCCCGCATCGGAGGGGTGCGCTGCTGGATGGT  
CAGCTCAACGACCGGTGGAGGGCGTGTGCTGGGATGGGCGCACGAGCTGGTGGACATCTACAGCGTCTCCTGGGGGCC  
CAACGACGACGGTGCACCGTGCAGGGCCCGGGACGGCTCGCCACCGAGGCCATCGAGAGGGGCATCCGAGAGGGCCGCG  
GCGGCAAGGGCGCCATCTACGTGTGGGCGTGGGCAACGGCGGACGCCGCGGCGACAACCTGCAACTGCGACGGCTACATC  
AACAGCGTGTACACGCTGTCCATCGGCTCGGCCTCGCAGCACGGCCAGTTCCTGTTGACGGCGAGCGCTGCGCCGCCAC  
CTTCGCCACCGCCTACTCCAGCGGCGCCTACTCCGACCAGATGATCGCGACGACGGACCTGCGCAACTCGTGACCCATCC  
GGCACACGGGCACCTCCGCGGGCGCGCCTCTGGCCGCGGCATCATCGCGCTCGCCCTGGAGGCCAACCCGGCGCTGACG  
TGGCGCGACGTGCAGCACCTGGTGGCGTGGACGGCGGAGTGGGCGCCGCTGAGCGACAACCTCGGCTGGGCGCGCAACGC  
GGCCGGCTTCCGCGTCAACACGCGCTTCCGCTTCCGCTGATGAACGCCGCGCGCTCGTCCGCGCGCCGCAACTGGA  
CCACCGTGGCGCCAAAGGCCGTCTGCTCCACGCCCGTGGCGCCCACGGCAACACGTGATAAAGCCAGGCGTGTGACG  
GTGGCGCACTTCCACACGGACGGCTGCGCCGGCACCGAGCGAGAAGTCAACTTCTGGAGCACGTGGAGCTGCAGGTGAA  
CCTGCGCTACTCGCTGCGGGGCGCCCTCGAGATACACCTCACGTCTGCTGCAGGAACGAAGGTGGAGTTGCTGAGTCAA  
GGAAGCTGGATAAATCCAGTGAAGTTTTCAAAGACTGGAATTCATGTGAGTTTCAACGTGGGGAGAGAGACCAGCTGGC  
ATTTGGACAGTAGAAATCATCGACAGGCAAGGAGGCTCCACGAACCGCACCGGGGAGCTGGTGTCCGCGTGCCTGATCCT  
GCACGGCACCAGGAGGCGCCGACACCTGAGGAGCGGGCCAGGGCCTACGACGACGACTACAACCACGTGCACAAGA  
AGATGGCGAACGCTGAGCCCATGGAGAAGCGGCTACCGCTGGATGTTTTGCAAGAGACGGACGCTGCGCTGGACTGGGCG  
GACATCATCGGTATCCCACTATCGTTAAGGAGCCAGCCTGATTTGAGGAGTATGCTGCTGAAGCTGTGGCTTAGTCGAT  
TCAAGAAAAGCAGGCAACATAACAACCTCAAGCCTGCAACACACTGGAGGAACAGACTGTACAGTACAATAAGCGACACT  
GTTTGCCATATAGTTGTATTACTGAAAGCATAAATAAATAATAGGTAATAAAGTGTATTTTTAATAAAAAA

>*Locusta migratoria* PC1 protein

MSLWAQLLVALLAGAGRAHDGAQNALHFSNEWVVRLEGGPLAAAAALARELYLLLGEVPGFPD TYRMLRYDHPPTQKRAS  
HMVTQRLAADARVLWAEQFQSKSRVKREDLPVPKQTQLLFNDELWDQEWYLRDRTRPDLPKLDLHVLVYYAAGITGKGV  
RVVVLDDGIERTHEDLRDNYDPAISFDANDDDPDPTPRYDLAGSNAHGTRCAGEIAMAANNKCGVGVAFNARIGGVRL  
DGDVNDRVEGVSLSGWAHELVDIYSVSWGNDDGRTVEGPGRLATEAIERGIREGRGGKGAIIYVWASNGGSRGDN CNCDG  
YINSVYTLSIGSASQHQFPWYGERCAATFATAYSSGAYSQMIATTDLRNSCTIRHTGTSAAAPLAAGI IALALEANPA  
L TWRDVQHLVAWTAEWAPLSDNLGWARNAAGFRVNRFRGFGLMNAALVAAAANWTTVPPKAVCSTPVAPTANTS IKPGV  
LTVAHFHTDGCAGTEREVN FLEHVELQVNLRYSLRGALEIHL TSAAGTKVELLSPRKLDKSSEGFKDWKFMSVLTWGERP  
AGIWTVEIIDRQGGSTNRTGELV SASLILHGTKEAPHHLRSGPRAYDDDYNHVHKMNAEPMEKRLPLDVLQETDAALD  
WADIIGIPLSLRSQPDFRSM LKLWL SRIQEKQAT -

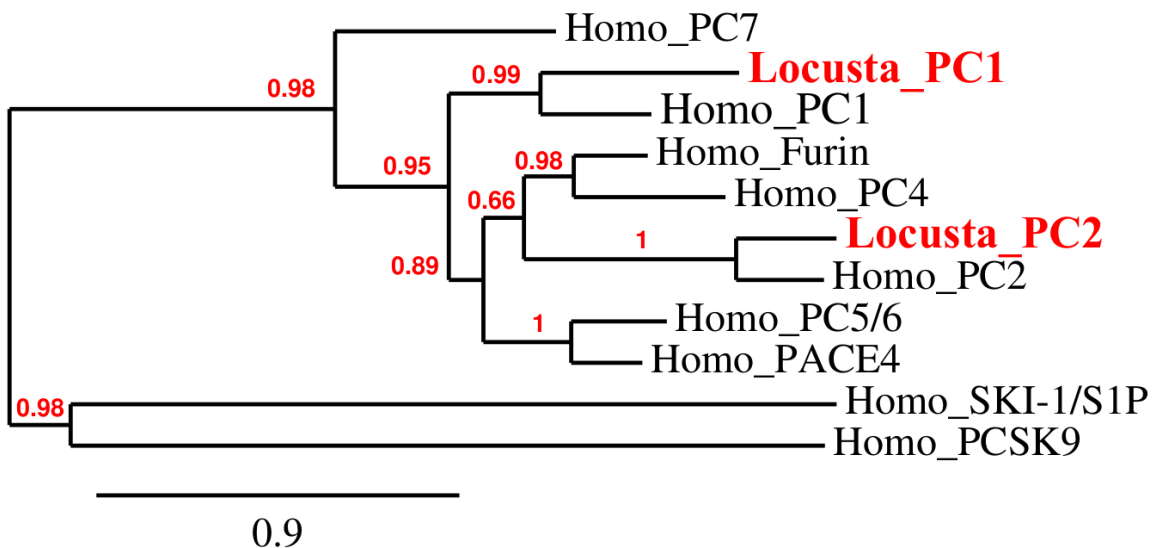
>*Locusta migratoria* PC2 cDNA (incomplete)

CTGGGGCGGCGAGCGACTGCACCTGGTCTCGCCCTGGGCTGGCCGCGCGCCGCGCCGCGCCGCCACCGCCGCGGC  
CGCAGGCCCTCGCAGGCTTCCACCAACTCGTTCCTGCTGGTGGCTGCGGGGCGCGCCCGCGCCGCGCTCGCAGACCAGG  
TGGCCGCGCGCACCGGCTTCTCAACCTGGGACCGGTGCTGGGCTCGGACCGCGAGTTCCACTTCGTGCACCGCGCGCTG  
CCGACGCCCCGAGCAAGCGCAGCATCCCGACATGCGGGCCTCAAGGTGGACCCGCTGGTGGAGGCGGCGGTGCAGCA  
GACGGGCTTACAGACGGGTGAAGCGCGGCTACAAGCCGCTGCGCGTGCAGAACCTGGTGAAGAACATGCGGCCGAGCGCG  
ACCCCGCAGACCCCTACTTCCGTTCCAGTGGTACCTCAAGAACACCGGCCAGAACGGCGGCAAGGCCAAGCTCGACCTC  
AACGTGAGGCCGCTGGGCGCAGGGCGTACCGGCAAGAACGTACCACCGCCATCATGGACGACGGTGTGGACTACAT  
GCACCCAGATCTCAAACATAATTATAACGCGCGCGCCAGCTACGACTTCAGCAGCAACGACCCGTACCCCTACCCGCGCT  
ACACCGACGACTGGTTC AACAGCCACGGGACGCGGTGCGCCGAGAGGTGGCAGCCGCCCCGGGACAACGGCGTGTGCGGC  
GTGGGCGTGCCTACGACTCCAAGATAGCAGGCATCCGATGCTGGATCAGCCGTACATGACGGACCTGATCGAGGCCAA  
CTCGATGGGCCACGAGCCAACTTATCGACATCTACAGCGCCTCCTGGGGGCCACCGACGACGGCAAGACGGTGGACG  
GGCCGCGCAACGCCACCATGCGCGCCATCGTCCGCGCGTCAACGAGGGCAGGAACGGGCTGGGCAACATCTACGTGTGG  
GCGAGCGGCGACGGCGGCGAGGACGACGACTGCAACTGCGACGGCTACGCGGCCAGCATGTGGACCGTGTCCATCAACAG  
CGCCATCAACGACGGCCAGAACGCGCACTACGACGAGAGCTGCTCCTCCACGCTCGCTCCACTTCAGCAACGGCGCCA  
AGGACCCCAACACCGGAGTGCAGCAGACGGACCTGTACGGCAAGTGCACCACCACGCACTCGGGCACGTGCGCCGCGCT  
CCGGAGGCGGCGGGAGTCTTCGCGCTGGCGCTGGAGGCCAACCCGACGCTGACGTGGCGCGACATCCAGCACCTGACGGT  
GCTCACGTGCAAGCGCAACTCGCTGTTGACGCGAAGCGGCGCTTCCACTGGACGATGAACGGCGTGGGGCTGGAGTTCA  
ACCACCTGTTGCGCTTCGGCGTGTGGACGCGGGCGCCATGGTGGCGCTGGCCAAGCAGTGGCGCACCGTGCCTGCCAGG  
TTCCACTGCGAGGGCGGCTCCCTCAACGAACCGCATGAGATCCCGTGCAGCGGGCCGCTGGTGTGAAGATCTCGACGGA  
CGCGTGCCGCGGCTGGACACGAGGTGGACTACCTGGAACACGTGCAGGCCGTCATCACGCTCAACGCGACGCGACGCTG  
GTGACCTCGAGCTTCTCTACCTCGCCATGGGGACAGATCGATGATCTTGAGCAGACGTGTTAACGATGATGATCAC  
CGTGATGGCTTACCAAATGGCCATTCATGACAACCTCACACCTGGGGAGAATATCCACAGGGTACATGGACACTGGAGT

TGGCTTCAATTCACCAATACCACAATCAGGCTTCTTAAAGGAATGGACTCTAATGTTGCATGGCACACGGGACCCACCAT  
 ATAGTGAGCTACCTGTCACAGACCCACACTCCAAGTTAGCCATCGTGAAGAAGGCCCATGAGGAGCGCAGCAAGTTGTAG  
 GACATCCAAAAGCTGTGACCTTATATTGTAATAGCTGTTAGACATGGTATGCCACTTTGATTATTGGCTAAACCCACTA  
 ACCTACAGTTTTTTCAGTAACACAATCAACTCATTCTGAGTTTTTGTAGTAGCTTCCCTACTTTGGTACAATTATTTTAA  
 TTAGTAAGTATCATATCCTGTTTTGTCCTTTATGACATACCACCAAGTTTTCAAAGGTCTTACCATGTCTAGGACCCAT  
 AGAGCAGATTCTGGAAATACTTATAAACTTCTTCATCCATAATTTCTTCTGAGCTCTGCTGTGTTGGTATCAATATT  
 ATTTGAGTGATTGAGGTGTTCAACAATAGATGAACCTTTTACTTAATGTTGAGTATTGTGCAGGTTTTAAAATAAAAGCA  
 ACACAGCAGCTGTAACCTTTTTCTAAAAGCAAAGAAGAAAAGCTTCTTTCATACAGCAACCTTCCATGTAGAGAGAACA  
 AATTTGAGGTAGAGAGTGCAAACCAATATGAAAGTTAATATATTTCTGTATAATACTACAAACTAAAGATCTGCATCAA  
 ATTATTGGTATTGGATGTATAACAAAGTAATGCCGAGATAAAATTACTTATTATATTCTGTTAATAGCTGTATGAACAAA  
 ATGAATGGGGAAAAGGGTG

>*Locusta migratoria* PC2 protein (incomplete N-terminal)

...LGAASALHLVLAALGLAAAAAATAAAGRPREVFTNSFLVRLRGAPGAAVADQVAARTGFLNLGPVLGSDREFHFV  
 HRALPHARSKRSIPHRRLKVDPLVEAAVQQTGFRRVKRGYKPLRVENLVKNMRPQRDPADPYFPFQWYLKNTGQNGGKA  
 KLDLNVEAAWAQVGTGKNVTTAIMDDGVDYMHPDLKHNYNARASYDFSSNDPYPYPRYTDDWFNSHGTRCAGEVAAARDN  
 GVCVGVVAYDSKIAGIRMLDQPYMTDLIEANSMGHEPNLIDIYSASWGPTDDGKTVDGPRNATMRAIVRGVNEGRNGLGN  
 IYVWASGDGGEDDDCNCDGYAASMWTVSINSAINDGQNAHYDESCSSTLASTFSNGAKDPNTGVATTDLYGKCTTTHTSGT  
 SAAPEAAGVFALEALANPQLTWRDIQHLTVLTSKRNSLFDKRRFHWTMNGVLEFNHLFGFVLDAGAMVALAKQWRT  
 VPARFHCEGGSLEPHEIPSRGPLVLKISTDACRGLDTQVDYLEHVQAVITLNATRGRDLELFLTSPMGRSMILSRRVN  
 DDDHRDGFTKWPFMTTHTWGEYPQGTWTLEVGFNSPIQSGFLKEWTLMLHGTRDPPYSELPVTDPHSKLAIKKAHEER  
 SKL-



Phylogenetic tree of two *Locusta* convertases and the human members and the of the kex-like protease family, illustrating that the latter are orthologs of vertebrate PC1 and PC2.

Pictures of the gel cropped in figs 2 and 3.

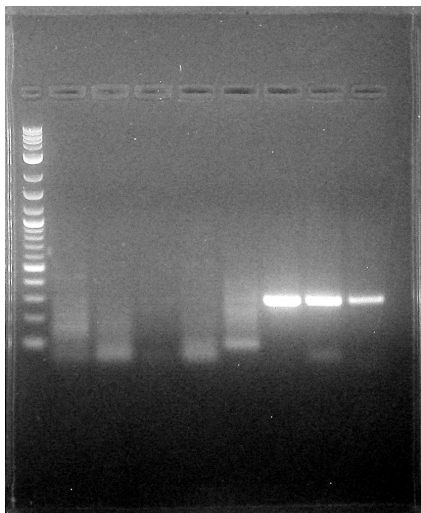


Fig. 2. SG-SAGP

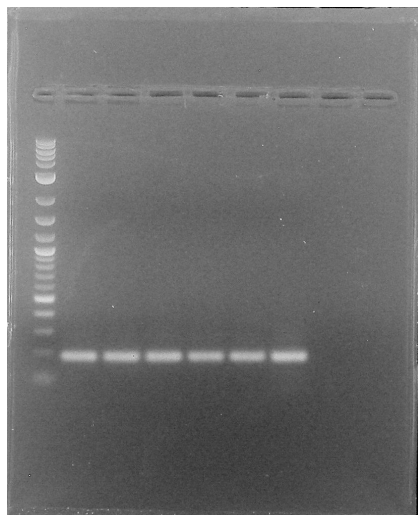


Fig. 2 actin

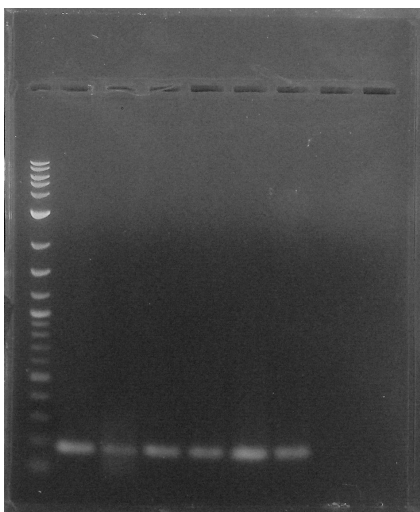


Fig. 3. PC1

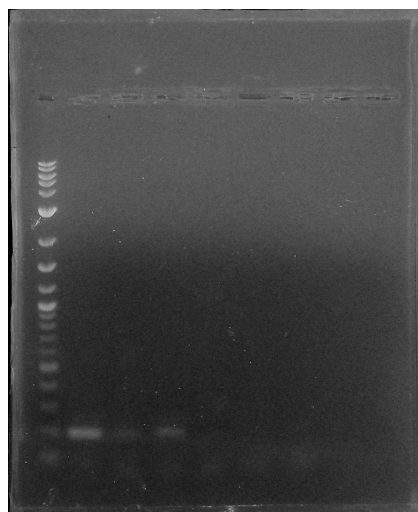


Fig. 3. PC2

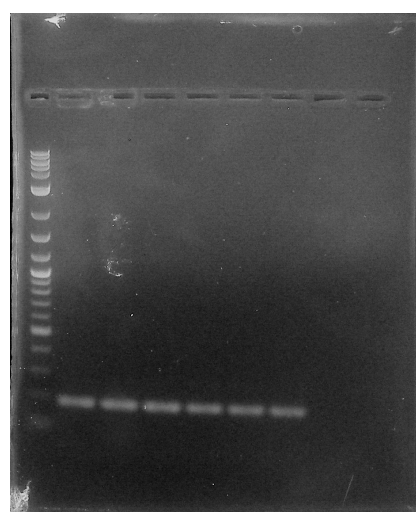


Fig. 3. actin

All gels 1.5% TAE, first lane markers (0.1, 0.2, 0.3, 0.4, **0.5**, 0.6, 0.7, 0.8, 0.9, **1.0**, 1.2, 1.5, 2.0, **3.0**, 4.0, 5.0, 6.0, 8.0 and 10.0 kilo base pairs). Expected sizes of the PCR products for SG-SASP, PC1, PC2 and actin cDNAs respectively 298, 181, 195 and 189 base pairs.

