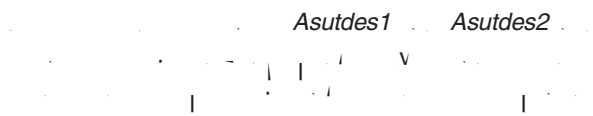
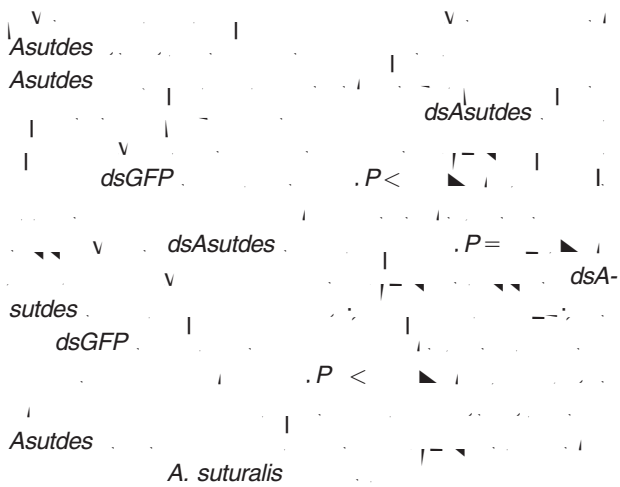


Spatial transcript profiles



Knockdown of *Asutdes* altered the female pheromone titre



Di ♂ i\$



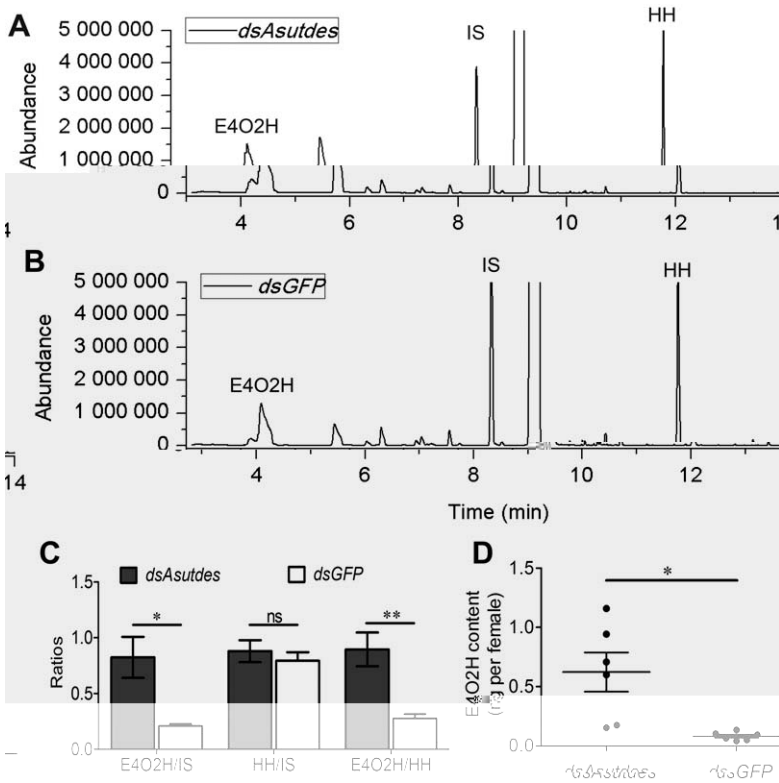
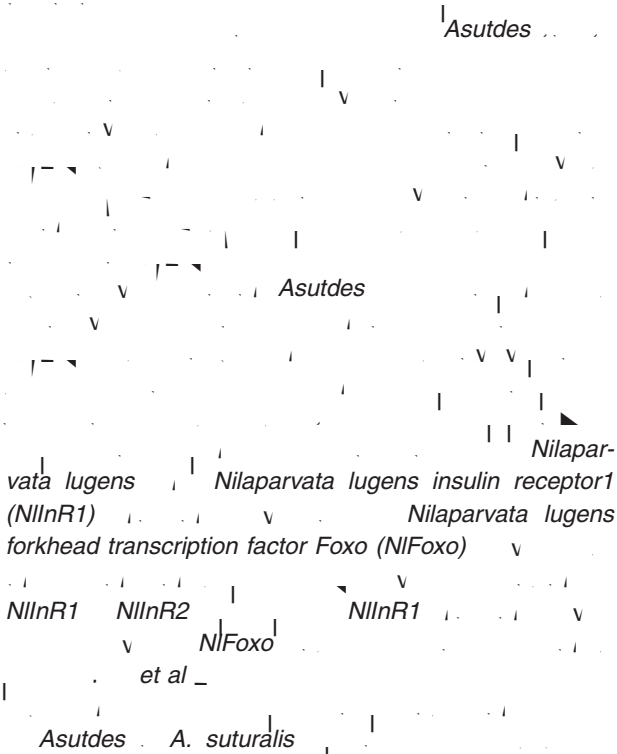
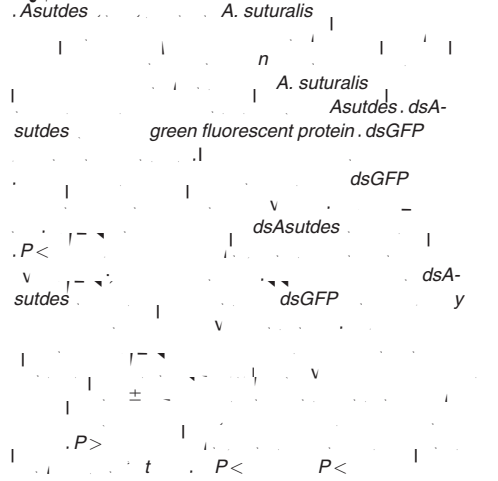


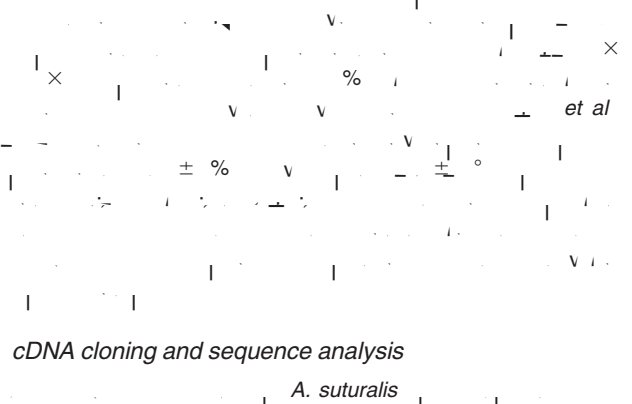
Figure 6. *Adelphocoris suturalis* desaturase



Experimental procedure

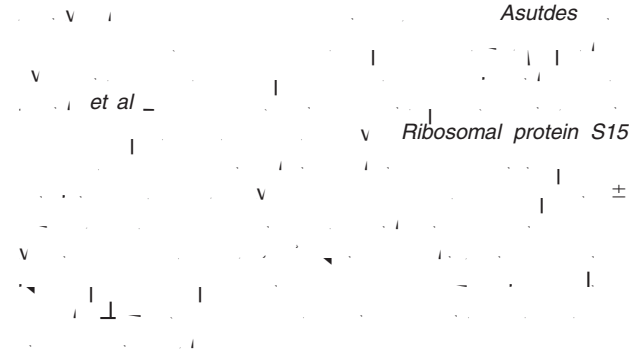
Insect rearing

A. suturalis

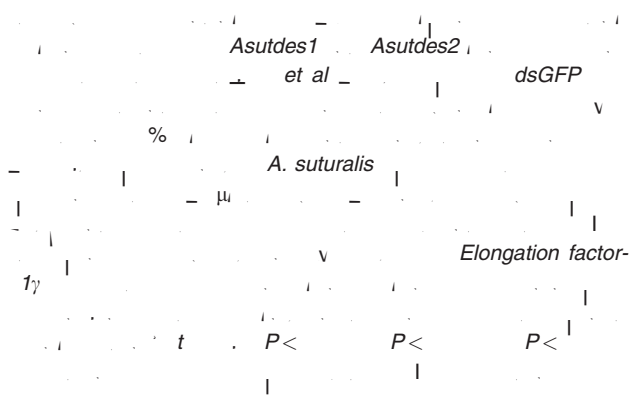


et al. &

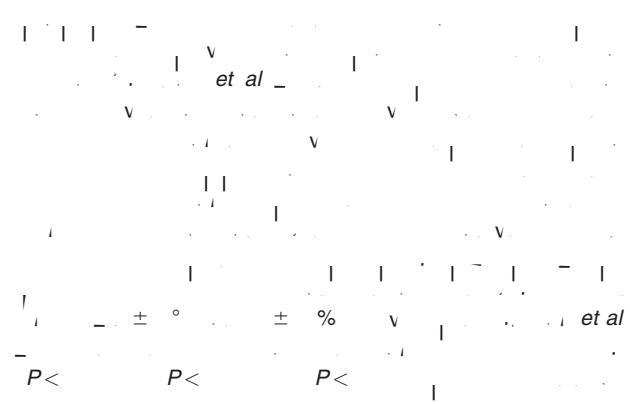
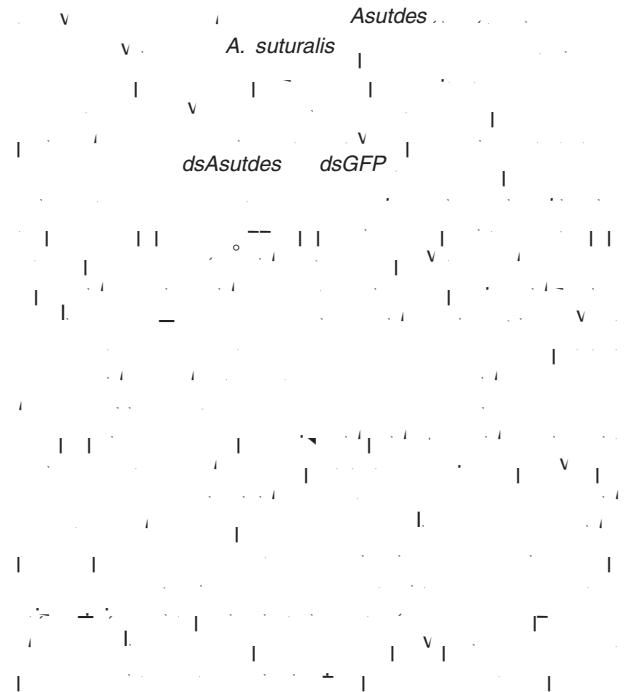
Spatial expression pattern analyses



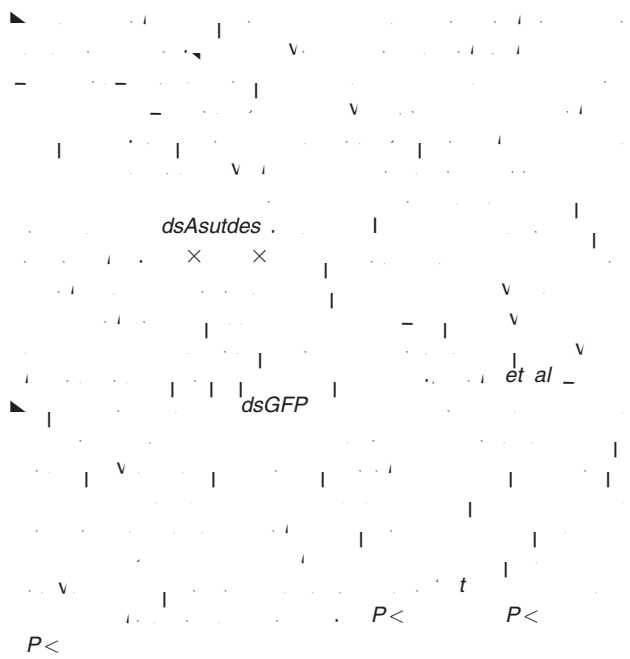
RNAi in



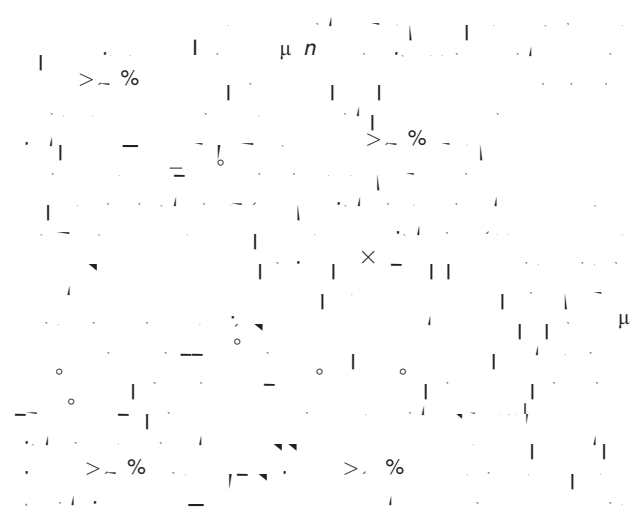
Y-tube olfactometer bioassay



Field trapping experiments



Pheromone extraction and GC-MS analysis



P> P< P< P<

Ac S edge 27

Refere ce

et al PLoS Genet 8

Sci Rep 6

Annu Rev Entomol 55

Nasonia vitripennis Insect Biochem Mol Biol 51

Necremnus tutae Anim Behav 112

et al Insect Biochem Mol Biol 43

et al Proc Natl Acad Sci USA 112

et al BMC Mol Biol 11

Drosophila melanogaster Insect Mol Biol 15

et al

Drosophila melanogaster Proc Natl Acad Sci USA 104

Drosophila Science 343

Drosophila mauritiana D. sechellia Genetics 145

Drosophila melanogaster Proc Natl Acad Sci USA 97

The Pherobase: Database of Pheromones and Semiochemicals

Ostrinia Proc Natl Acad Sci USA 108

et al Lutzomyia longipalpis J Proteomics 96

et al Proc R Soc B 281

Annu Rev Entomol 61

et al Ctenopseustis obliquana C. herana J Chem Ecol 40

Choristoneura rosaceana J Insect Sci 2

Tribolium castaneum Insect Biochem Mol Biol 51

Res 29 Prog Lipid Res 29

Biol Rev Camb Philos Soc 82

Chem 239 Top Curr Chem 239

Insect Biochem Mol Biol 24

et al *Dendroctonus ponderosae*
Proc Natl Acad Sci USA

110

Genetics 162

Mol Biol Evol 33

et al

Nature 466

et al

Proc Natl Acad Sci USA 110

Ostri-

Adelphocoris suturalis
Environ Entomol 39

Insect Biochem Mol Biol 29

Trichoplusia ni

Colaphellus bowringi *Insect Biochem Mol Biol* 74

Biochim Biophys Acta 1394

et al

Crop Prot 27

Phaseolus vulgaris

Acta Phytophysiol Sinica 35

et al

Science 328

et al

Adelphocoris suturalis

Gene

551

Prostaglandins Leukot

Essent Fatty Acids 68

et al

Bombyx mori *Proc Natl Acad Sci*

USA 100

et al

Bombyx mori

Proc Natl Acad Sci USA 101

Drosophila

Nat Commun 6

Insect Chemical Ecology: Evolution of Sex Pheromones and the Role of Asymmetric Tracking &

Biochem J 349

Proc

Natl Acad Sci USA 100

Proc Natl Acad Sci USA 99

Helicoverpa zea

Trichoplusia ni *Insect Biochem Mol Biol* 31

Ips pini

Insect Biochem

Mol Biol 42

Insect Biochem

Mol Biol 36

Nat Protoc 3

try 33

Biochemis-

et al

Dendroctonus ponderosae *Insect Biochem Mol Biol* 53

Dendroctonus pon-

Prostaglandins Leukot Essent Fatty Acids 68

Acids 68

Trends Ecol Evol 23

Ostrinia scapu-

lalis *O. zealis* *J Chem Ecol* 31

Insect Biochem Mol Biol 29

Drosophila melanogaster *Insect Biochem*

Mol Biol 35

Proc Natl Acad Sci USA **90**

Insect Biochem Mol Biol **40**

et al

Nature **519**

Proc Natl Acad Sci USA **104**

et al

Adelphocoris suturalis.
J Econ Entomol **104**

Adelphocoris suturalis.
J Insect Sci **14**

et al.
Adelphocoris suturalis *Chemoecol-*
ogy **25**

g r i g l f s a i s

Tab e S1