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(54) **NUCLEIC ACID SEQUENCES FROM
DIABROTICA VIRGIFERA VIRGIFERA
LECONTE AND USES THEREOF**

(76) Inventors: **Scott E. Andersen**, St. Louis, MO
(US); **Glenn R. Hicks**, Castro Valley,
CA (US); **Joseph E. Huesing**,
Chesterfield, MO (US); **Charles P.
Romano**, Chesterfield, MO (US);
Clayton S. Vetsch, North Stonington,
CT (US)

Correspondence Address:
MONSANTO COMPANY
800 N. LINDBERGH BLVD.
ATTENTION: GAIL P. WUELLNER, IP
PARALEGAL, (E2NA)
ST. LOUIS, MO 63167 (US)

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(57) **ABSTRACT**

Expressed Sequence Tags (ESTs) isolated from the Western
Corn Rootworm, *Diabrotica virgifera virgifera* LeConte, are
disclosed. The invention encompasses nucleic acid mol-
ecules that encode *D. v. virgifera* protein homologs and
fragments thereof. In addition, antibodies capable of binding
the proteins are encompassed by the present invention. The
disclosed ESTs have particular utility in isolating genes and
promoters, identifying and mapping the genes involved in
developmental and metabolic pathways, and determining
gene function. The ESTs provide a unique molecular tool for
the targeting and isolation of novel genes for plant protection
and improvement. The invention also relates to methods of
using the disclosed nucleic acid molecules, proteins, frag-
ments of proteins, and antibodies, for example, for gene
identification and analysis, and preparation of constructs.