## BIOTECHNO (Biotechnobase)

| Subject Coverage          | • Agriculture               |
|                          | • Development of novel therapeutic |
|                          | • Environmental science     |
|                          | • Food science               |
|                          | • Forensic science           |
|                          | • Medicine & health care     |
|                          | • Microbial biotechnology    |
|                          | • Pharmaceuticals & pharmacology |
|                          | • Textiles                   |

<table>
<thead>
<tr>
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</table>

| Features                 | Thesaurus: None              |
|                          | Alerts (SDIs): Not available |
|                          | CAS Registry Number® Identifiers: ✓ |
|                          | Keep & Share: ✔                |

<table>
<thead>
<tr>
<th>Record Content</th>
<th>Bibliographic data, indexing, drug trade names and their manufacturers, medical device trade names and manufacturers, CAS Registry Numbers®, and abstracts.</th>
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<table>
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| Database Producer        | Elsevier B.V.              |
|                         | E-products Team            |
|                         | 1000 AE Amsterdam          |
|                         | The Netherlands            |
|                         | Phone: +31 20 485 3507     |
|                         | Fax: +31 20 485 3222       |
|                         | Email: ebd-marketing@elsevier.nl |

<table>
<thead>
<tr>
<th>Copyright Holder</th>
<th>Elsevier B.V.</th>
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<table>
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Cluster

- AGRICULTURE
- ALLBIB
- AUTHORS
- BIOSCIENCE
- BUSINESS
- CASRNS
- CHEMENG
- CHEMISTRY
- ORPSOURCE
- ENGINEERING
- ENVIRONMENT
- FOOD
- HEALTH
- MEDICINE
- MEETINGS
- PHARMACOLOGY
- TOXICOLOGY

STN Database Cluster information:
http://www.stn-international.com/en/customersupport/customer-support#cluster+%7C+subjects+%7C+features
### Search and Display Field Codes

Fields that allow left truncation are indicated by an asterisk (*).

#### General Search Fields

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<thead>
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<th>Search Code</th>
<th>Search Examples</th>
<th>Display Codes</th>
</tr>
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### General Search Fields (cont'd)

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<thead>
<tr>
<th>Search Field Name</th>
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<th>Search Examples</th>
<th>Display Codes</th>
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<td>Title (3)</td>
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<tr>
<td>Trade Name (Chemical Name, Drug Trade Name and Medical Device Trade Name)</td>
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<td>S ACTRAPID/TN</td>
<td>CN, TN, RN</td>
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</table>

(1) Search with implied (S) proximity is available in this field.
(2) Numeric search field that may be searched with numeric operators or ranges.
(3) Title of higher level (e.g. title of book in a record of a book article) are searchable in /SO.

### DISPLAY and PRINT Formats

Any combination of formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 TI AU. The fields are displayed or printed in the order requested.

Hit-term highlighting is available for all fields. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

<table>
<thead>
<tr>
<th>Format</th>
<th>Content</th>
<th>Examples</th>
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<td>Number of occurrences of hit term(s) and field(s) in which they occur</td>
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(1) Custom display only.
(2) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.
(3) FREE is not available for print.

### SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).
### SELECT, ANALYZE, and SORT Fields (cont'd)

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<td>WC.T</td>
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</table>

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answers set, e.g., SEL HIT CT.
(2) Appends /BI to the terms created by SELECT.
(3) Selects or analyzes Chemical Name (CN) and appends /BI to the terms created by SELECT.
(4) Selects or analyzes Chemical Name (CN) and CAS Registry Number and appends /BI to the terms created by SELECT.
(5) SELECT HIT or ANALYZE HIT are not valid with this field.
(6) SELECT or ANALYZE CIT allows you to extract the reference from the source documents in this file and have them automatically converted to a citation format for searching in the SCISEARCH file. SEL or ANALYZE CIT extracts first author, publication year, volume, first page, with a truncation symbol and with /RE appended to the terms created by SELECT.
(7) Selects or analyzes CODEN, ISSN or ISBN with /ISN appended to the terms created by SELECT.
(8) Selects or analyzes CODEN, ISSN or ISBN with /SO appended to the terms created by SELECT.

### Sample Records

**DISPLAY ALL**

AN  2000:30051583  BIOTECHNO
TI  HAESA, an Arabidopsis leucine-rich repeat receptor kinase, controls floral organ abscission
AU  Jinn T.-L.; Stone J.M.; Walker J.C.
CS  J.C. Walker, Division of Biological Sciences, University of Missouri, Columbia, MO 652114, United States.
   E-mail: WalkerJ@missouri.edu
SO  Genes and Development,  (01 JAN 2000), 14/1 (108-117), 56 reference(s)
   CODEN: GEDEEP  ISSN: 0890-9369
DT  Journal; Article
CY  United States
LA  English
Abscission, the natural shedding of leaves, flowers and fruits, is a fundamental component of plant development. Abscission is a highly regulated process that occurs at distinct zones of cells that undergo enlargement and subsequent separation. Although some components of abscission, including accumulation of the hormone ethylene and cell wall-degrading enzymes, have been described, the regulatory pathways remain largely unknown. In this paper we described a critical component required for floral organ abscission in Arabidopsis thaliana, the receptor-like protein kinase HAESA. Histochemical analysis of transgenic plants harboring a HAESA promoter:: β-glucuronidase reporter gene and in situ RNA hybridization experiments show HAESA expression in the abscission zones where the sepalas, petals, and stamens attach to the receptacle, at the base of pedicels, and at the base of petioles where leaves attach to the stem. Immunodetection, immunoprecipitation, and protein kinase activity assays reveal HAESA is a plasma membrane serine/threonine protein kinase. The reduction of function of HAESA in transgenic plants harboring an antisense construct results in delayed abscission of floral organs, and the severity of the phenotype is directly correlated with the level of HAESA protein. These results demonstrate that HAESA functions in developmentally regulated floral organ abscission.