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*(Soybean Mosaic Virus=SMV)*

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Beckman J21B

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Spinco L50

TW50

Na-EDTA

(Na-DIECA)

( Shimadzu UV-160)

DAS-ELISA

(AS-0543,DSMZ)

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1. International Committee Taxonomy Viruses
  2. Acyrthosiphon pisum
  3. Aphis fabae
  4. Myzus persicae
  5. Aphis gossypii
  6. Transgenic

EM301 philips (  $\mu$ l)  
SDS-PAGE (Bio-Rad, Richmond)  
PBS / )  
Fast Red TPIA  
Freund's complete adjuvant  
ISEM Leaf dip  
SMV % (w/v)  
۱۳ ۱۲ ۱۱ ۱۰ ۹

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7. Amsoy
  8. Clark
  9. Williams82
  10. Pershi
  11. Hill
  12. Stressland
  13. Amcor71

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1. 4-Chloro naphtol
  2. Methanol
  3. phosphat buffer salin
  4. Booster
  5. Ouchterlony agar double diffusion
  6. Uranil acetat

Ks4694

L78-379

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SMV

*Nicotiana tabacum* var.

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*trabosan*

DIBA

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TPIA

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*Chenopodium album*

*Chenopodium quinoa*

*Chenopodium amaranticolor*

*Phaseolus vulgaris* cv. *Top crop*

*Glycine max* sp.

*Nicotiana tabacum* L.cv. *trabosan*

*Nicotiana tabacum* L.cv. *samsun*

*Nicotiana tabacum* L.cv. *glutinosa*

*Nicotiana tabacum* L.cv. *clevelandii*

*Phaseolus vulgaris* L.cv. *Bountiful*

*Phaseolus vulgaris* L.cv. *Red kidney*

*Vicia faba*

*Vigna unguiculata*

*Pisum sativum*

*Datura metel*

*Datura stramonium*

*Petunia hybrida*

*Cucumis sativus*

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BP

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SMV

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SMV

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SMV

SMV

RT-PCR<sup>1)</sup>

SMV

SMV

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SMV

RT-PCR

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SMV

KS

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1.Reverse transcription-PCR

2.Monoclonal

3. Primer

4. Aggregation

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