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*(Soybean Mosaic Virus=SMV)*

**SMV**

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Beckman J21B

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PEG(6000)

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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 ( μl)  
 SDS-PAGE (Bio-Rad, Richmond)  
 / )  
 PBS / %

( ) TPIA  
 Fast Red /

Freund's complete adjuvant

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ISEM Leaf dip

% (w/v)

λ γ  
 ( ) SMV  
 13 12 11 10 9

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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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( )SMV

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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*

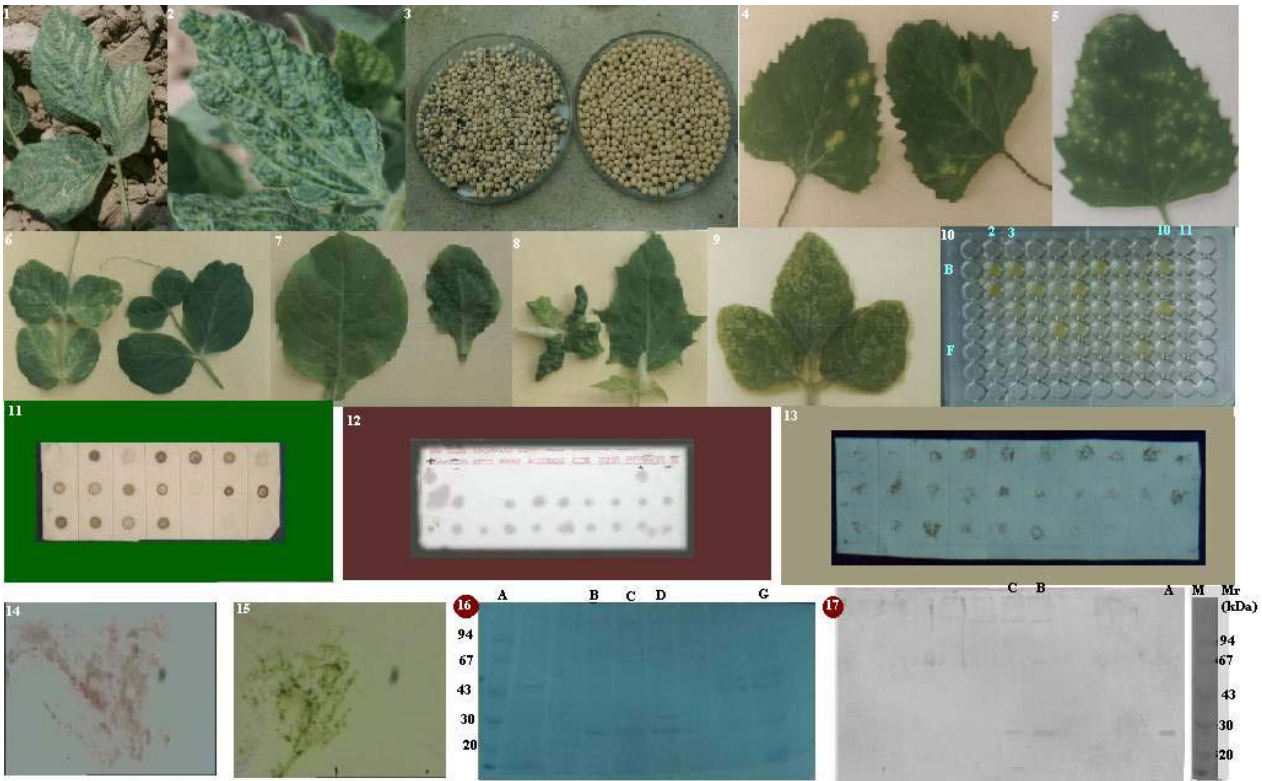
*Datura metel*

*Datura stramonium*

*Petunia hybrida*

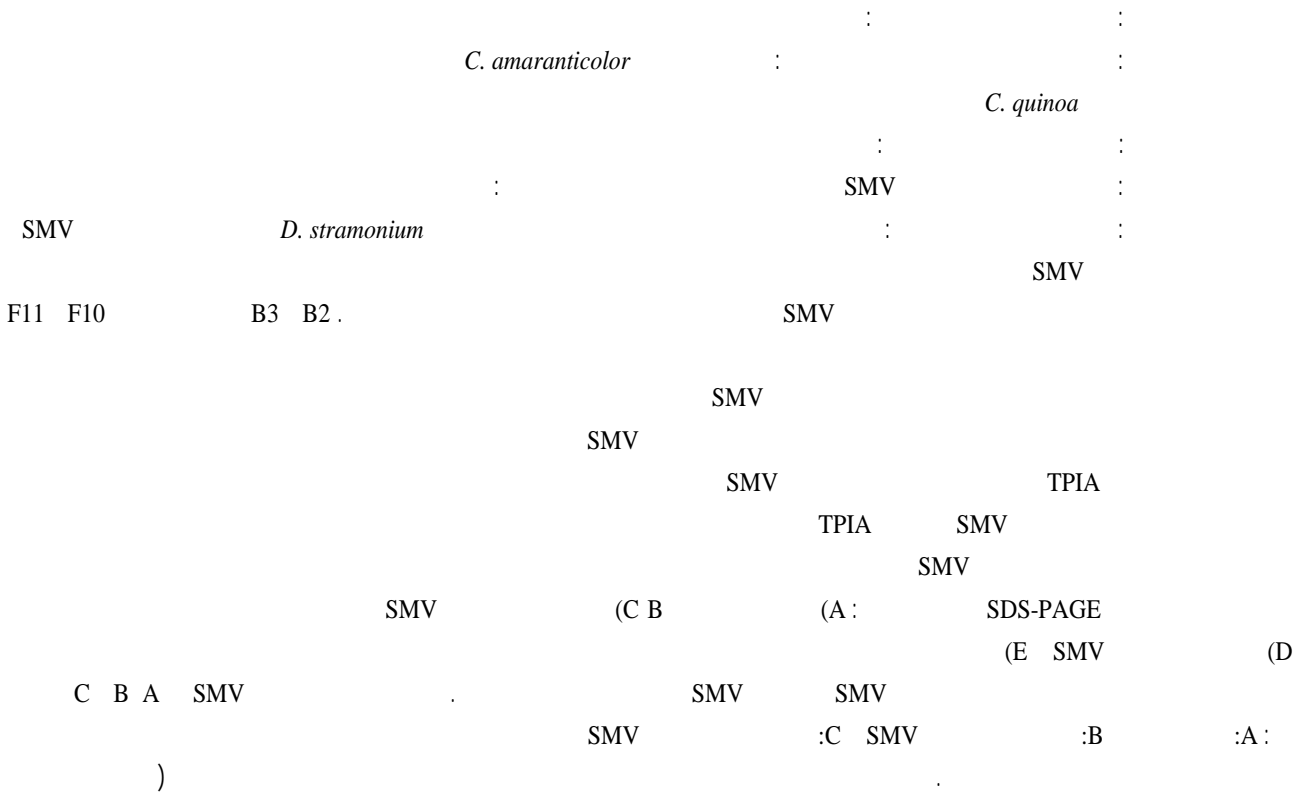
*Cucumis sativus*

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SMV

Vein banding



BP

JK

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SMV

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SMV

( ) Pacumbaba

SMV

SMV

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

SMV

SMV

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RT-PCR

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SMV

SMV

KS

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1.Reverse transcription-PCR

2.Monoclonal

3. Primer

4. Aggregation

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