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(Soybean Mosaic Virus=SMV)

SMV

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(ICTV) '1

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Top Crop

SMV

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SMV

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SMV

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)

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

EM301 philips (μ l)
 SDS-PAGE (Bio-Rad, Richmond)
 PBS / %

() TPIA
 Fast Red /

Freund's complete adjuvant

ISEM Leaf dip

% (w/v)

() SMV

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

-
- 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

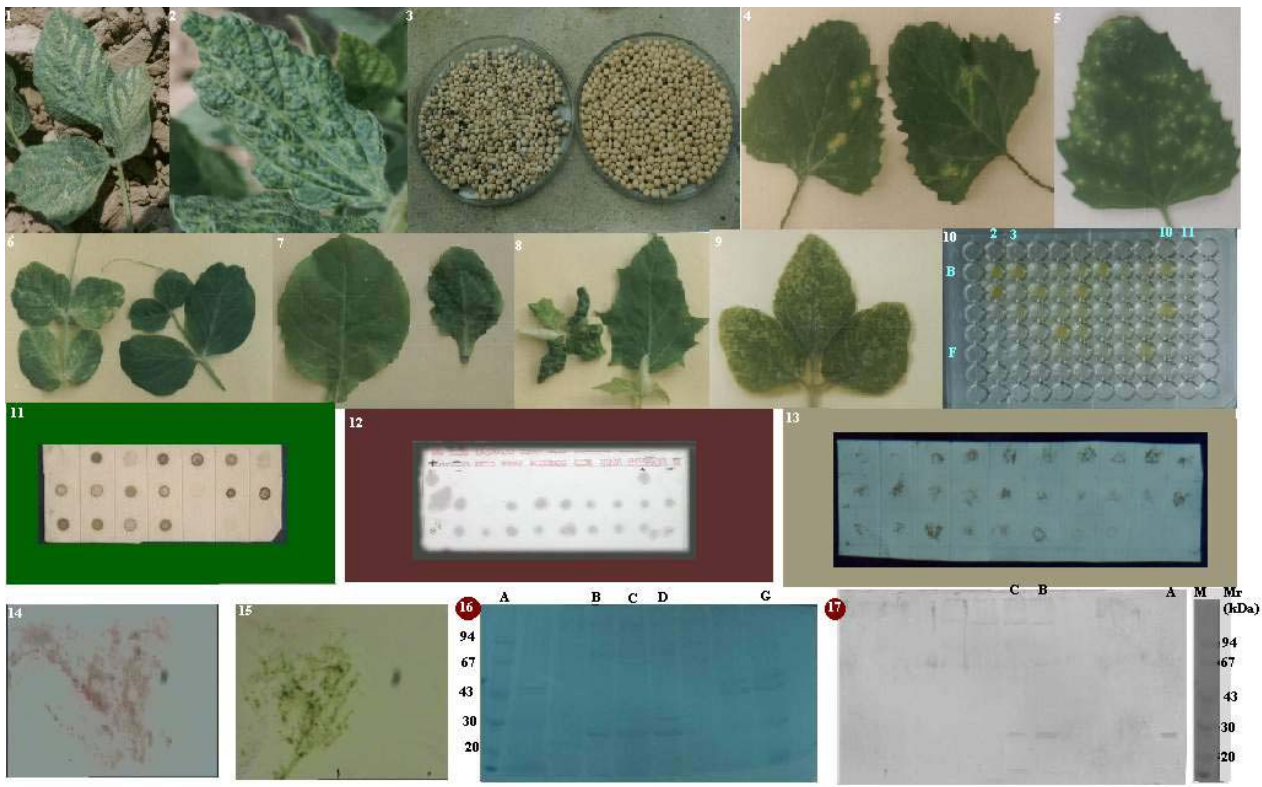
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()SMV

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



SMV

Vein banding

C. amaranticolor

C. quinoa

D. stramonium

SMV

F11 F10

B3 B2

SMV

SMV
SMV

SMV TPIA
SMV SMV

SMV (C B (A : SDS-PAGE (E SMV (D

C B A SMV

SMV SMV

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SMV

RT-PCR¹⁾

SMV

SMV

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SMV

RT-PCR

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SMV

SMV

SMV

KS

1.Reverse transcription-PCR

2.Monoclonal

3. Primer

4. Aggregation

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