

Best practices: Health diagnosis in forage legume genebanks

Plant species	Virus								Fungi				Insects and others	
	AMV	BCMV	BYMV	CPMV	CPSMV	PeMoV	PSV	Others					Pests	Detection of pests
Herbaceous legumes														
<i>Aeschynomene hystrix</i>		√	√	√		√	√							
<i>Alysicarpus glumaceus</i>		√	√	√	√	√							Scale insects Spider mites	VME
<i>Centrosema acutifolium</i>		√	√	√	√	√								
<i>Centrosema arenarium</i>		√	√	√	√	√								
<i>Centrosema brasilianum</i>		√	√	√	√	√								
<i>Centrosema macrocarpum</i>		√	√	√	√	√								
<i>Centrosema pascuorum</i>		√	√	√	√	√								
<i>Centrosema pubescens</i>		√	√	√	√	√								
<i>Chamaecrista rotundifolia</i>			√		√	√								
<i>Clitoria ternatea</i>	√	√		√		√								
<i>Desmodium intortum</i>		√	√	√	√	√							Scale insects	VME
<i>Desmodium uncinatum</i>		√	√	√	√	√							Scale insects	VME
<i>Lablab purpureus</i>	√	√	√	√	√	√	√						Scale insects Spider mites	VME
<i>Macroptilium atropurpureum</i>	√	√			√	√							Spider mites	VME
<i>Macrotyloma axillare</i>	√	√	√			√			CMV SMV					
<i>Neonotonia wightii</i>	√			√									Spider mites	VME
<i>Pueraria phaseoloides</i>														
<i>Rhynchosia minima</i>	√	√	√	√	√	√	√						Spider mites	VME
<i>Stylosanthes fruticosa</i>							√		CMMV					
<i>Stylosanthes guianensis</i>							√		CMMV				Scale insects Spider mites	VME
<i>Stylosanthes hamata</i>							√		CMMV				Scale insects Spider mites	VME
<i>Stylosanthes scabra</i>							√		CMMV				Scale insects Spider mites	VME
<i>Stylosanthes viscose</i>							√		CMMV				Scale insects Spider mites	VME
<i>Trifolium burchellianum</i>	√		√	√	√	√	√		BBSV				Spider mites	VME
<i>Trifolium cryptopodium</i>	√		√	√	√	√	√		BBSV				Spider mites	VME

<i>Trifolium decorum</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium multinerve</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium rueppellianum</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium quartianum</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium repens</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium semipilosum</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium schimperi</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium simense</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium steudneri</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Trifolium tembense</i>	√		√	√	√	√	√	BBSV					Spider mites	VME
<i>Vicia dasycarpa</i>		√	√				√	PSbMV					Scale insects	VME
<i>Vicia sativa</i>		√	√				√	PSbMV					Scale insects	VME
<i>Vigna unguiculata</i>	√	√	√	√	√	√							Scale insects Spider mites Bruchid	VME
<i>Zornia glabra</i>														
<i>Zornia latifolia</i>														
Fodder tree legumes														
<i>Acacia nilotica</i>								SMV					Bruchid	VME
<i>Acacia nubica</i>								SMV					Bruchid	VME
<i>Acacia Senegal</i>								SMV					Bruchid	VME
<i>Acacia seyal</i>								SMV					Bruchid	VME
<i>Acacia tortilis</i>								SMV					Bruchid	VME
<i>Cajanus cajan</i>		√	√	√	√	√							Bruchid	VME
<i>Calliandra calothyrsus</i>														
<i>Chamaecytisus palmensis</i>														
<i>Desmanthus virgatus</i>								CMV						
<i>Faidherbia albida</i>														
<i>Gliricidia sepium</i>	√	√		√		√								
<i>Leucaena diversifolia</i>								CMV						
<i>Leucaena leucocephala</i>								CMV						
<i>Leucaena pallida</i>								CMV						
<i>Leucaena revoluta</i>								CMV						
<i>Sesbania sesban</i>		√				√	√						Bruchid	VME

Acronyms

ELISA – Enzyme-linked immunosorbant assay

VME – Visual and microscopic examination of infected leaves or seeds

AMV - Alfalfa Mosaic Virus

BBSV - Broad Bean Stain Virus

BCMV - Bean Common Mosaic Virus
BSMV - Bean Severe Mosaic Virus
BYMV - Bean Yellow Mosaic Virus
CMMV - Cocksfoot Mild Mosaic Virus
CMV - Cucumber Mosaic Virus
CPMV - Cowpea Mosaic Virus
CPSMV - Cowpea Severe Mosaic Virus
PEBV - Pea Early Browning Virus
PeMoV - Peanut Mottle Virus
PSbMV - Pea Seed-borne Mosaic Virus
PSV - Pea Streak Virus
SMV - Sorghum Mosaic Virus