

YAM VIRUS DISEASE LIST

Name	Acronym	Classification	Synonym	Symptoms	Diagnostic method	Bioassay host range	Distribution	Mode of transmission
<i>Chinese yam necrotic mosaic virus</i>	ChYNMV	Order: Unassigned Family: Potyviridae Genus: Macluravirus					Japan	
<i>Dioscorea bacilliform virus</i>	DBV	Order: Unassigned Family: Caulimoviridae Genus: Badnavirus	<i>Dioscorea alata</i> badnavirus, Yam internal brown spot disease, <i>Dioscorea bulbifera</i> badnavirus				World wide	Mealybug
<i>Japanese yam mosaic virus</i>	JYMV	Order: Unassigned Family: Potyviridae Genus: Potyvirus					Japan	Aphid(?)
<i>Yam mild mosaic virus</i>	YMMV	Order: Unassigned Family: Potyviridae Genus: Potyvirus	Yam virus 1, <i>Dioscorea alata</i> virus, D. <i>alata</i> vein yellowing virus, D. <i>alata</i> chlorosis virus, <i>Dioscorea</i> greenbanding virus				World wide	Aphids (?). Not mechanical
<i>Yam mosaic virus</i>	YMV	Order: Unassigned Family: Potyviridae Genus: Potyvirus	<i>Dioscorea</i> green banding mosaic virus, YV-N, <i>Dioscorea alata</i> virus, <i>Dioscorea trifida</i> virus				World wide	Aphids, mechanical, not seed or contact
<i>Beet mosaic virus</i>	BtMV	Order: Unassigned Family: Potyviridae Genus: Potyvirus	<i>Dioscorea alata</i> ring mottle virus				Togo	
<i>Cucumber mosaic virus</i>	CMV	Order: Unassigned Family: Bromoviridae Genus: Cucumovirus					Guadeloupe, west africa	
<i>Dioscorea dumetorum virus</i>		Order: Unassigned Family: Potyviridae Genus: Potyvirus					Nigeria, Sri Lanka, Bangladesh	
<i>Dioscorea latent virus</i>	DLV	Order: Tymovirales Family: Alphaflexiviridae					Central America, South Pacific	
<i>Dioscorea mild chlorosis mosaic virus</i>		Order: Unassigned Family: Tombusviridae Genus: Carmovirus					Nigeria	
<i>Yam internal brown spot virus</i>		Caulimoviridae, Badnavirus		Y		D. <i>alata</i>		
<i>Yam mosaic virus</i>	YMV	Potyviridae; Potyvirus		Y		<i>Nicotiana benthamiana</i> (W), <i>Dioscorea cayenensis</i> (W); D. <i>prae-hensilis</i> ; D. <i>composita</i> , D. <i>floribunda</i>	Guadeloupe, Guyana, west Africa	Aphids, mechanical, not seed or contact
<i>Dioscorea alata ring mottle virus</i>		Potyviridae; Potyvirus		Y		<i>Dioscorea alata</i>	Togo	Aphids, mechanical
<i>Dioscorea alata virus</i>								
<i>Dioscorea green banding mosaic virus</i>		Potyviridae; Potyvirus				<i>Nicotiana benthamiana</i>	Nigeria, Togo	
<i>Dioscorea latent virus</i>		Flexiviridae; Potexvirus				<i>Nicotiana megalosiphon</i> , N. <i>benthamiana</i>	Puerto Rico	Mechanical, not seed, pollen or contact
<i>Dioscorea trifida virus</i>		Potyviridae; Potyvirus				<i>Dioscorea alata</i> , D. <i>cayenensis</i>	Guadeloupe	
		Caulimoviridae, Badnavirus						

More than 15 viruses belonging to five different genera, namely, Potyvirus, Macluravirus, Badnavirus, Cucumovirus, and Potexvirus, are known to infect yams. However, Yam mosaic virus (YMV) and *Dioscorea alata* virus (DAV) potyviruses are widely prevalent on yams. Like many other vegetatively propagated crops, yam diseases are also perpetuated and spread mainly through infected planting materials. Use of resistant varieties, disease-free healthy planting materials, and strict phytosanitary measures are advocated for management of yam diseases.

control PV-
of Cassava
brown

strains
Positive
control PV-

cassava
mosaic virus
(ACMV) and
TAS-ELISA
AS-0421-