

**SECOND SUPPLEMENT TO HOST INDEX OF VIRUS
DISEASES OF PLANTS ***

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AIZOACEAE

MOLLUGO VERTICILLATA

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

AMARANTHACEAE

AMARANTHUS GRAECIZANS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

AMARANTHUS HYBRIDUS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

CELOSIA ARGENTINA CRISTATA

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

GOMPHRENA NITIDA

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

AMARILIDACEAE

AMARYLLIS BELLADONA

Spotted wilt of tomato. Taubenhaus, Texas. 1936.

APOCINACEAE

VINCA MINOR

Cucumber mosaic. Wellman. Florida. 1935.

ARACEAE

ZANTEDESCHIA ALBOMACULATA

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

ZANTEDESCHIA REHMANNI

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

BIGNONIACEAE

TAREBUA PALLIDA

Witches' broom. Cook. Puerto Rico. 1936.

* *Journal of Agriculture of the University of Puerto Rico.* 19(3): 315-406, July, 1935. 20(3): 691-727, July, 1936.

BROMELIACEAE

ANANAS SATIVUS

Mosaic. Carter. Hawaii. 1937. Causes a yellow spot different from the yellow spot previously reported. Also attacks *Commelina nudiflora*.

CAMPANULACEAE

CAMPANULA PYRAMIDALIS

Lycopersicum virus 3.

LOBELIA INFLATA

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

LOBELLA SPICATA

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

LOBELIA SPLENDENS

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

LOBELIA sp.

Cucumber virus 1. Ainsworth. England. 1936.

CARYOPHYLLACEAE

CERASTIUM VULGATUM

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

STELLARIA MEDIA

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.
Black ring spot. See cabbage in Brassica.

CHENOPODIACEAE

BETA VULGARIS

Leaf curl or crinkle. Wille. Germany. 1928.
Savoy. Coons, Kotilla & Stewart. U. S. 1936. This appears to be the same as the disease reported by Arthur and Golden (Indiana) as a bacterial disease in 1892.
A new mosaic disease of cabbage. Larson & Walker. Wisconsin. 1937.

CHENOPODIUM ALBUM

Black ring spot. See cabbage in Brassica.
Tobacco virus 1. Holmes. New Jersey. 1937.

CHENOPODIUM AMBROSIODES

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

CHENOPODIUM MURALE

Black ring spot. See cabbage in Brassica.

SALSOLA PESTIFER

Curly top of sugar beet. Carter. California. 1934.

SARCOBATUS VERMICULATUS

Curly top of sugar beet. Carter. California. 1934.

SPINACIA OLERACEA

A new mosaic of cabbage. Larson & Walker. Wisconsin. N. 1937. Tobacco ring spot.

SPINACIA sp.

Black ring spot. See cabbage in Brassica.

NOTE: Spinach is a host for beet mosaic in Germany and America. (Boning 1927 and Hoggan 1933). *Chenopodium album*, *Amaranthus retroflexus* & *Sonchus arvensis* (Mouravieff *et al.*, 1930). *Chenopodium album* in England (K. M. Smith in England, 1934).

COMMELINIACEAE

COMMELINA NUDIFLORA

Mosaic. Carter. Hawaii. 1937. Also attacks *Ananas sativus*.

COMPOSITAE

AMBROSIA ARTEMISIFOLIA

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

BIDENS FRONDOSA

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

CALENDULA sp.

A new mosaic of cabbage. Larson & Walker. Wisconsin. N. 1937.

CALLISTEPHUS SINENSIS

A new virus disease. Shapovalov & Dufrenoy. France. 1936. Also attacks *Dahlia* sp. *Lycopersicon esculentum* and *Nicotiana tabacum*. Transmitted by *Thrips tabaci*.

DAHLIA sp.

A virus disease. Shapovalov & Dufrenoy. France. 1936. Also attacks *Callistephus sinensis*, *Lycopersicon esculentum* and *Nicotiana tabacum*. Transmitted by *Thrips tabaci*.

ERIGERON ANNUS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

ERIGERON CANADENSIS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

GALINSOGA PARVIFLORA

Tabacco mosaic virus 1. Holmes. New Jersey. 1937.

HELIANTHUS TUBEROSUS

Tabacco mosaic virus 1. Holmes. New Jersey. 1937.

HIERACIUM SCABRUM

Tabacco mosaic virus 1. Holmes. New Jersey. 1937.

LACTUCA sp.

Dot disease. Brandenburg, Germany. 1928.

LACTUCA CANADENSIS

Spotted wilt of tomato. Taubenhau. Texas. 1936.

LACTUCA GRAMINIFOLIA

Spotted wilt of tomato. Taubenhau. Texas. 1936.

LACTUCA SATIVA var. *longifolia*

Streak (spotted wilt) Snyder & Thomas. California. 1936.

This is a combination of streak with pea virus 1 and pea virus 3.

SENECIO CRUENTUS

Spotted wilt of tomato. Taubenhau. Texas. 1936. Also reported by K. M. Smith in England in same year.

ZINNIA sp.

Spotted wilt of tomato. Taubenhau. Texas. 1936.

A new mosaic of cabbage. Larson & Walker. Wisconsin. N. 1937.

CONVOLVULACEAE

IPOMOEA BATATA

Curly top of sugar beet. Taubenhau & Altstadt. Texas. 1936.

IPOMOEA PANDURA

Curly top of sugar beet. Taubenhau & Altstadt. Texas. 1936.

IPOMOEA TRIFIDA

Curly top of sugar beet. Taubenhau & Altstadt. Texas. 1936.

CRUCIFERAE

BARBAREA VULGARIS

Curly top of sugar beet. Taubenhau & Altstadt. Texas. 1936.

BRASSICA sp.

A new mosaic of cabbage. Larson & Walker. Wisconsin. N. 1937. Black ring spot of cabbage. Tompkins, Gardner & Thomas. California. 1937. Similar to ring spot of cabbage

reported by K. M. Smith in England in 1935. Attacks all cabbages. Infections have been obtained on rhubarb, *Chenopodium album*, *C. murale*, spinach, *Stellaria media*, *Brassica arvensis*, kale, Brussels sprouts, cauliflower, broccoli, kohlrabi, rutabaga, turnip, wallflower, annual and Brompton stock, dame violet,, Virginia stock, water cress, honesty, Chinese radish, Turkish and white Burley tobacco and *Nicotiana glutinosa*.

A dangerous disease of turnip, rape and rutabaga, Kaufman. Germany. 1935. Transmitted by *Lygus pratensis*.

BRASSICA ADPRESSA

A new mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA ALBA

A new virus disease of cauliflower. Tompkins. California. 1937.

BRASSICA ARVENSIS

Black ring spot. See cabbage.

A new mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA CAMPESTRIS

A new mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA ALBA, B. CERNUA, B. NAPOBRASSICA, B. NAPUS var. *chinensis*, B. NIGRA, B. OLERACEA var. *bullata*, B. TYPICA.

Mosaic. Chamberlain. New Zealand. 1936. No data to determine if this is the same as the mosaic in other parts of the world.

BRASSICA GEMMIFERA

Necrotic ring spot. California.

BRASSICA JUNCEA COSS

New mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA NAPOBRASSICA

New virus disease (*chlorosis*). Kaufman. Germany. 1936. Transmitted by *Lygus pratensis*.

BRASSICA NAPUS

New virus disease. Kaufman. Germany. 1936. Transmitted by *Lygus pratensis*.

New mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA NIGRA

New mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA OLERACEAE (varieties *acephala*, *gemmifera*, *capitata*, *botrytis*)

New mosaic disease of cauliflower. Tompkins. California. 1937.

Cabbage ring spot. Smith. 1935.

BRASSICA OLERACEAE var. *botrytis* (broccoli & cauliflower).

Necrotic ring mosaic. California.

BRASSICA OLERACEA var. *capitata*

Necrotic ring mosaic. Mississippi and Texas.

BRASSICA PE-TSAI

New mosaic disease of cauliflower. Tompkins. California. 1937.

BRASSICA RAPA

New mosaic disease of cauliflower. Tompkins. California. 1937.

CAPSELLA BURSA-PASTORIS

New mosaic disease of cauliflower. Tompkins. California. 1937.

New mosaic disease of cabbage. Larsen & Walker. Wisconsin.
N. 1937.

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

CHEIRANTHUS CHERI

Cabbage ring spot virus.

NOTE: Ainsworth reports that the mosaic-colorations previously reported are due to a virus similar to the one reported by Hoggan and Johnson (Phytopathology 25: 640) and to one reported by K. M. Smith (Gardeners' Chronicle 98: 213 and Ann. Appl. Biol. 22: 239-242).

CHEIRANTHUS CHERI ♀ X ERYSIMUM CHEIRANTOIDES ♂).

Cabbage ring spot.

COCHLEARIA AMORACIA

Mosaic. Dana. Oregon. 1932.

An undifferentiated Crucifer virus.

HESPERIS MATRONALIS

A new mosaic of cabbage. Larsen & Walker. Wisconsin. N.
1937.

Cabbage ring spot virus 1. K. M. Smith. England. 1937.

IBERIS AMARA

New mosaic disease of cauliflower. Tompkins. California. 1937.

LEPIDIDIUM CAMPESTRIS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

New mosaic disease of cauliflower. Tompkins. California. 1937.

LUNARIA ANNUA

- Mosaic. Ogilvie. England. 1931.
New mosaic of cauliflower. Tompkins. 1937.
Brassica virus 3. K. M. Smith. England. 1937.
Coarse mottle (Crucifer virus).

MATHIOLA BICORNIS

- Spotted wilt of tomato. Taubenhaus. Texas. 1936.

MATHIOLA INCANA

- Spotted wilt of tomato. Taubenhaus. Texas. 1936.
Cabbage ring spot virus 1. K. M. Smith. England. 1937.
Rosette virus 3. K. M. Smith. England. 1937.
A new mosaic of cabbage. Larsen & Walker. Wisconsin. N.
1937.
A new mosaic of cauliflower. Tompkins. California. 1937.
Stunting. Beet virus 1. K. M. Smith. England. 1937.

NASTURTIUM OFFICINALE

- Cucumber mosaic virus 1. Ainsworth. England. 1935.

RADICULA PALUSTRIS

- Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

RAPHANUS RAPHANISTRUM

- New mosaic of cauliflower. Tompkins. California. 1937.

RAPHANUS SATIVUS CAUDATUS

- Mosaic. Kulkarni. India. 1922.

SISYMBRIUM ALTISSIMUM

- Curly top of sugar beet. Carter. California. 1930.

SISYMBRIUM OFFICINALE

- Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

SISYMBRIUM THALINUM

- Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

SOPHIA FILIPES

- Curly top of sugar beet. Carter. California. 1930.

SOPHIA SOPHIA

- Curly top of sugar beet. Carter. California. 1930.

THLASPI ARVENSE

- A new mosaic of cabbage. Larsen & Walker. Wisconsin. N.
1937.

CUCURBITACEAE

MICRAMPELIS LOBATA

Cucumber virus 1. Was reported without number by Doolittle 1925.

EUPHORBIACEA

EUPHORBIA PEPLUS

Mosaic. New South Wales. 1936.

MANIHOT UTILISSIMA

Stem lesion cause by Manihot virus 2.

PEDILANTHUS AUGUSTIFOLIUS

Specimens brought to the writer by Mr. J. I. Otero, September 21, 1936 showed symptoms of mosaic which were apparently due to a virus. Puerto Rico.

GERANIACEAE

GERANIUM CAROLINIANUM

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PELARGONIUM DOMESTICUM

Spotted wilt of tomato. Taubenhous. Texas. 1936.

PELARGONIUM GRAVIOLENS

Spotted wilt of tomato. Taubenhous. Texas. 1936.

PELARGONIUM ZONALE

Mosaic. Jones. Washington State. N. 1937.

Crinkle. Jones. Washington State. N. 1937.

GRAMINEAE

AGROPYRON REPENS

Mosaic rosette of wheat. McKinney. Mississippi Valley. 1937.

Yellow mosaic of wheat. McKinney. Mississippi Valley. 1937.

SACCHARUM OFFICINARUM

NOTE: The following five diseases of minor importance which have been reported show some characteristics of virus diseases but it has not been proved that they are caused by viruses.

Leaf freckles. Priode. Cuba. 1929.

Lemon stripe. Priode. Cuba. 1928.

Spindle blotch. Faris. Cuba. 1927.

Spindle blotch. Faris. Cuba. 1927.

Gray stripe. Weir. Cuba. 1927.

TRITICUM AESTIVUM

- Green mosaic rosette (virus 1). McKinney. Illinois. 1937.
 Green mosaic (virus 2). McKinney. Virginia. 1937.
 Yellow mosaic (virus 3). McKinney. Illinois. 1937.
 Light green mosaic (virus 4). McKinney. Kansas. 1937.
 Yellow mosaic (virus 5). McKinney. Kansas. 1937.
 Mild streak (virus 6). McKinney. Kansas. 1937.
 Yellow streak (virus 7). McKinney. Kansas. 1937.

TRITICUM sp.

- Green and yellow mosaic. Wada & Fukana. Japan. 1937.

ZEA MAYS

- New disease. Storey. South Africa. 1937. Transmitted by
Cicadulina mbila.

IRIDACEAE**FREESIA sp.**

- Freesia mosaic.

IRIS RICHARDI

- Mosaic. Brierley & McWhorter. Pacific Coast. 1936.

IRIS UNGUICULARIS ALBA

- Mosaic. Brierley & McWhorter. Pacific Coast. 1936.

NARCISSUS spp.

- Narcissus stripe (Tulip virus 1) Atanosoff. Bulgaria, 1928.

JUGLANDACEAE**HICORIA AQUATICA & H. PECAN**

- Bunch disease. Cole. Louisiana. 1936. May be a virus disease.

LABIATAE**HEDEOMA PULEGIODES**

- Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

LAMIUM AMPLEXICAULE

- Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PRUNELLA VULGARIS

- Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

SALVIA sp.

- Chlorosis. New South Wales. 1932.

LEGUMINOSAE

CICER ARIETIUM

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

CROTALARIA INCANA

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

CROTALARIA INTERMEDIA

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

CROTALARIA LANCIOLATA

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

CROTALARIA MAXILLARIS

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

CROTALARIA RETUSA

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

CROTALARIA SPECTABILIS

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

CROTALARIA USARAMOENSIS

Mosaic. Virginia. Johnson & Lefebvre. N. 1937.

DESMODIUM CANADENSE

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

GLEDITSIA TRIACATHUS

Witches' broom. Grant & Hartley. Ohio. 1938.

LATHYRUS LATIFOLIUS

Severe mosaic. Johnson & Jones. Washington State. 1937.

Enation mosaic. Johnson & Jones. Washington State. 1937.

LATHYRUS ODORATUS

Pea mosaic virus No. 2 from *Vicia faba* by *Macrosiphum pisi*.
Osborn. New Jersey. 1937.

Streak (spotted wilt) Snyder & Thomas. California. 1936

Combinations of streak with pea virus 1 and pea virus 3.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

Severe mosaic. Johnson & Jones. Washington State. 1937.

Enation mosaic. Johnson & Jones. Washington State. 1937.

LATHYRUS SATIVUS

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

LENS ESCULENTA

Severe mosaic. Johnson & Jones. Washington State. 1937.

Pea virus 1 & 2 (strains 2-A, 2-B & 2-C). Stubbs. Wisconsin.
1937.

LUPINUS sp.

A virus disease. Spienrenburg. Germany. 1936.

A browning virus. Kohler. Germany. 1937. Same as Ainsworth's yellow mosaic of cucumber, Johnson's cucumber virus 1 and spinach mosaic.

LUPINUS ALBUS

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

LUPINUS ANGUSTIFOLIUS

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

Cucumber virus 1. K. M. Smith. England. 1937.

LUPINUS DENSIFLORUS

Pea mosaic virus. Murphy & Pierce. Idaho. 1937.

LUPINUS HARTWEGII

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

LUPINUS LEUCOPHYLLUS

Tomato spotted wilt virus 3. K. M. Smith. England. 1937.

LUPINUS NANUS

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

LUPINUS SUGARNOSUS

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

MEDICAGO ARABICA

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

Dwarf. Weimer. U. S. 1936. Transmitted by grafting but not by inoculation.

MEDICAGO HISPIDA

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

MEDICAGO LUPULINA

Severe mosaic. Johnson & Jones. Washington State. 1937.

MEDICAGO SATIVA

Severe mosaic. Johnson & Jones. Washington State. 1937.

Enation mosaic. Johnson & Jones. Washington State. 1937.

* Alfalfa virus 2. Pierce. Wisconsin. 1934.

* White clover mosaic virus 1. Pierce. Idaho. 1935.

Lucerne or alfalfa mosaic (Medicago virus 1).

MELILOTUS ALBA

Vein-mosaic. Osborn. New Jersey. 1937.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

Pea mosaic virus No. 2 from *Vicia faba* by *Macrosiphum pisi*. Osborn. New Jersey. 1937.

MELILOTUS ALBA var. *annua*.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

Pea mosaic virus 2 from *Vicia faba* by *Macrosiphum pisi*. Osborn. New Jersey. 1937.

MELILOTUS INDICA

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

MELILOTUS OFFICINALIS

Severe mosaic. Johnson & Jones. Washington State. 1937.

* Yellow bean mosaic virus 2. Pierce. Wisconsin. 1934. Idaho. 1935.

* Common pea mosaic virus 3. Pierce. Idaho. 1935.

* White clover mosaic virus 1. Pierce. Idaho. 1935.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1934.

PHASEOLUS ACUTIFOLIUS var. *latifolius*

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1934.

One sided mosaic on refugee bean. Horsfall, Burkholder & Reinking. New York. 1937. This disease was mentioned by Harrison & Burkholder in 1936.

PHASEOLUS VULGARIS

Pea mosaic virus 2 from *Vicia faba* by *Macrosiphum pisi*. Osborn. New Jersey. 1937.

Dwarf. Harrison & Burkholder. New York. 1936. N.

Severe mosaic on several varieties. Johnson & Jones. Washington State. 1937.

Enation mosaic on Corbett refugee only. Johnson & Jones. Washington State. 1937.

* Common bean mosaic virus 1. Pierce. Wisconsin. 1934. Idaho. 1935.

* Yellow bean mosaic virus 2. Pierce. Wisconsin. 1934. Idaho. 1935.

* White clover mosaic virus 1. Pierce. Idaho. 1935.

* Tobacco mosaic virus 1. Pierce. Wisconsin. 1934.

* Tobacco ring spot virus. Pierce. Wisconsin. 1934.

NOTE: Corrections: Bean viruses Nos. 1 & 2, alfalfa virus No. 2 and tobacco ring spot virus which are credited to Price on page 703 of the second supplement should be credited to Pierce. Pea viruses Nos. 1 & 3, soy bean virus No. 1 and local lesion virus are not transmissible to *Phaseolus vulgaris*. They should be listed under *Pisum sativum*.

PISUM SATIVUM

- Local lesion virus. Pierce. Idaho. 1934.
- Streak (spotted wilt). Snyder & Thomas. California. 1936.
- N. This is a combination of streak with pea viruses 1 & 2.
- Mosaic. Inoculated from *Trifolium pratense*, *T. repens*, *T. hybridum* and *Melilotus alba*. Zaumeyer & Wade. 1936.
- Pea viruses 1 & 3. Pierce. Idaho. 1934.
- Pea viruses 1 & 2 (strains 2-A, 2-B and 2-C). Wisconsin. 1937.
- Pea mosaic virus No. 2 from *Vicia faba* by *Macrosiphum pisi*. Osborn. New Jersey. 1937.
- Tobacco ringspot virus. Stubbs. Wisconsin. 1937.
- Soy bean virus 1. Pierce. Idaho. 1934.
- Enation pea mosaic virus 1. Pierce. Idaho. 1935.
- * Enation pea mosaic virus. Johnson & Jones. Washington State. 1937. Similar to Zaumeyer & Wade's common pea mosaic but different in that it does not attack refugee bean.
- * Common pea mosaic (pea virus 1). Pierce. Idaho. 1935.
- * White clover virus. Pierce. Idaho. 1935.
- * Broad bean local lesion virus. Idaho. Pierce. 1935.
- Yellow bean virus 2. Pierce. Idaho. 1935.
- Severe mosaic. Johnson & Jones. Washington. 1937. Similar to Zaumeyer & Wade's sweet clover mosaic.
- Datura virus 1.

NOTE: Chamberlain (Australia 1937) reports that the pea mosaic of Australia is same as in U. S. That it attacks blue lupins, broad beans, sweet peas and garden peas. It is transmitted by *Myzus persicae*, *Aphis rumicis* and *Macrosiphum gei*.

SOJA MAX

- * Soy bean mosaic virus 1. Pierce. Idaho. 1935.
- * Enation pea mosaic virus 1. Pierce. Idaho. 1935.
- * Broad local lesion virus.
- Vein mosaic. Osborn. New Jersey. 1937.

TRIFOLIUM AGRARIUM

- Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM CAROLINIANUM

- Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM DUBIUM

- Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM GLOMERATUM

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM HYBRIDUM

Mosaic virus 1. Zaumeyer & Wade. U. S. 1936.

Severe mosaic. Johnson & Jones. Washington State. 1937.

Enation mosaic. Johnson & Jones. Washington State. 1937.

Vein mosaic. Osborn. New Jersey. 1937.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM INCARNATUM

Pea virus 2 from *Vicia faba* by *Macrosiphum pisi*. Osborn.
New Jersey. 1937.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

Vein mosaic. Osborn. New Jersey. 1937.

TRIFOLIUM PRATENSE

Pea virus 2 from *Vicia faba* by *Macrosiphum pisi*. Osborn.
New Jersey. 1937.

Severe mosaic. Johnson & Jones. Washington State. 1937.

* Alfalfa virus 2. Pierce. Wisconsin. 1934.

* Common pea mosaic virus 3. Pierce. Idaho. 1935.

Yellow bean virus 2. Pierce. Idaho. 1935.

* White clover mosaic virus 1. Pierce. Idaho. 1935.

Vein mosaic. Osborn. New Jersey. 1937.

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM PROCUMBENS

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM REFLEXUM

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

TRIFOLIUM REPENS

White clover mosaic virus 1.

Tobacco ring spot.

* Alfalfa virus 2. Pierce. Wisconsin. 1934.

* White clover mosaic virus 1. Pierce. Idaho. 1935.

Severe mosaic. Johnson & Jones. Washington State. 1937.

Vein mosaic. Osborn. New Jersey. 1937.

TRIFOLIUM SUAVEOLENS

Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

VICIA FABA

- Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.
 Severe mosaic. Johnson & Jones. Washington State. 1937.
 Vein mosaic. Osborn. New Jersey. 1937.

VICIA FABA var. *minor*.

- * Yellow bean mosaic virus 2. Pierce. Wisconsin. 1934. Idaho. 1935.
 * Alfalfa virus 2. Pierce. Wisconsin. 1934.
 * Tobacco ringspot virus. Pierce. Wisconsin. 1934.
 * Common pea mosaic virus 3. Pierce. Idaho. 1935.
 * Enation pea mosaic virus 1. Pierce. Idaho. 1935.
 * White clover mosaic virus 1. Pierce. Idaho. 1935.
 Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

VICIA SATIVA

- Severe mosaic. Johnson & Jones. Washington State. 1937.
 Pea mosaic virus 3. Murphy & Pierce. Idaho. 1937.

* NOTE: Correction for error on page 703 of first supplement. Three records attributed to Price should have been credited to Pierce, who has given me his records in full. These records are marked in the preceding paragraphs with *

NOTE: The enation mosaic virus appears to be the same as common mosaic of Johnson & Jones, and of Osborn and similar to the one reported by Zau-meyer & Wade in 1936. It differs from the bean mosaic of Z. & W. (1935). The severe mosaic virus appears to be similar to that reported by Pierce (1935) and to that described by Z. & W. (1936) as pea virus 3.

LILLIACEAE

FRITILLARIA CAMSCHATCENSIS

Green mosaic. Japan.

HYCINTHUS spp.

Hyacinth stripe, virus 1 (same as tulip virus).

LILIUM sp.

Crooked neck. Stout. New York. 1927.
 Pimple leaf. Known by New York florists for many years.

LILIUM AURATIUM & var. *platyphyllum*

Green mosaic, yellow mosaic and crooked neck. Kawamura. Japan. 1938.

LILIUM CANDIDUM

Latent virus (same as tulip virus). McWhorter. Oregon. 1937.

LILIUM ELEGANS

Green mosaic. Kawamura. Japan. 1938. Also on several varieties.

Yellow mosaic. Kawamura. Japan. 1938. Also on variety *simiplenes*.

LILIUM LONGIFLORUM

Latent virus (same as tulip virus). McWhorter. Oregon. 1937.

LILIUM LONGIFLORUM FORMOSANUM

Green and yellow rosette and pimple leaf.

LILIUM LONGIFLORUM GIGANTUM

Green and yellow rosette and pimple leaf.

LILIUM LONGIFOLIUS ALBOMARGINATUS and also var. *Togo*.

Yellow mosaic.

Green mosaic on varieties *Agata* and *Togo*.

LILIUM LEICHTLINII MAXIMOWICZII

Green mosaic.

LILIUM SPECIOSUM ALBUM

Green and yellow mosaic.

LILIUM SPECIOSUM RUBRUM

Green and yellow mosaic.

LILIUM SPECIOSUM KRAETZERI

Green mosaic.

LILIUM TIGRINUM

Latent virus (same as tulip virus). McWhorter. Oregon. 1937.

Tomato spotted wilt. New South Wales. 1936.

Green mosaic.

LILIUM TIGRINUM FORTUNEI

Green and yellow mosaic.

LILIUM UKYURI

Green mosaic.

MALVACEAE

ABUTILUM ARBORUM

ABUTILON PATERSONI

ABUTIFOLIUM VITIFOLIUM

} Chlorosis. Lindemuth. 1872-78.

ABUTILON TONELIANUM

Variations. Morrens. Mexico. 1869.

MORACEAE

HUMULUS LUPULUS

Fluffy tip or bunched top. Salmon. England. 1936. Probably due to a virus.

NOTE: According to Salmon (1935) the definite virus diseases previously reported are nettlehead, mosaic, chlorotic disease.

Slip down. Magie. New York. 1937.

MORUS sp.

Mosaic. New Jersey. 1936.

MYRTACEAE

CHAMAELANCIUM UNCINATUM

Mosaic. New South Wales. 1935.

PAPAVERACEAE

CHELIDONIUM MAJUS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PASSIFLORACEAE

PASSIFLORA sp.

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA AURANTIA

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA COERULEA

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA HERTIANA

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA INCARNATA

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA LUTEA

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA QUADRANGULARIS

Woodiness or bullet disease. New South Wales. 1928.

PASSIFLORA SUBEROSA

Woodiness or bullet disease. New South Wales. 1928.

TASONIA MOLLISIMA

Woodiness or bullet disease. New South Wales. 1928.

PHYTOLACCACEAE

PHYTOLACCA DECANDRA

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PLANTAGINACEAE

PLANTAGO MAJOR

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PLANTAGO REGELI

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PLANTAGO LANCEOLATA

Tobacco mosaic virus 1. Holmes. New Brunswick. 1937.

POLYGONACEAE

FAGOPYRUM ESCULETUM

Stunting (cucumber virus 1) K. M. Smith. England. 1937.

POLYGONUM AVICULARE

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

POLYGONUM CONVULVULUS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

POLYGONUM ERECTUM

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

RHEUM sp.

Black ring spot. See cabbage in Brassica.

RUMEX sp.

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

RUMEX ACETOSELLA

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

RUMEX SCUTATUS

Curly top of sugar beet.

PRIMULACEAE

PRIMULA ABCONIA

Cucumber virus 1. Ainsworth. England. 1936.

PRIMULA JAPONICA

Cucumber virus 1. Ainsworth. England. 1936.

RANUNCULACEAE

DELPHINIUM sp.

Witches' broom. Same as stunt. Stunt, dwarf and witches' broom are due to the same virus.

PAEONIA sp.

Ringspot. Green. England. 1935.

RANUNCULUS sp.

Yellows. New South Wales.

RANUNCULUS FASCICULARIS

Curly top of sugar beet. Taubenhauß & Altstatt. Texas. 1936.

RANUNCULUS PUSILLUS

Curly top of sugar beet. Taubenhauß & Altstatt. Texas. 1936.

RANUNCULUS SCLERATUS

Curly top of sugar beet. Taubenhauß. Texas. 1936.

ROSACEAE

COTONEASTER HARROVIANA

Mosaic of apple. See *Pyrus*.

ERIOBOTRYA JAPONICA

Mosaic of apple. See *Pyrus*.

FRAGARIA sp.

Mosaic. New South Wales. 1936.

Crinkle of strawberry. Wormald & Harris. England. 1936.

PHOTINIA ARBUTIFOLIA

Mosaic of apple. See *Pyrus*.

PRUNUS sp.

Mosaic of apricot, cherry, peach and plum reported by Atanasoff in 1934. Transmitted by *Anuraphis padi*.

Mosaic was believed to be the same as peach mosaic (but not proven) was reported on apricot, almond, prune, plum and Myrobalan plum in California by Cochran in 1937.

Apparently a new disease of prume. Thomas & Hildebrand. New York. 1936.

PRUNUS ALLEGHANIENSIS

Asteroid spot. Cochran & Smith. California. N. 1938.

PRUNUS ARMENIACA

Peach rosette. I.

Peach mosaic.

PRUNUS AMERICANA

Little peach. Manns. Delaware. 1936.

Peach yellows. Hartzell. New York. 1935.

Peach rosette. I.

PRUNUS COMMUNIS

Peach mosaic.

Peach yellows. Hartzell. New York. 1935.

PRUNUS DOMESTICUS

Little peach. Manns. Delaware. 1936.

PRUNUS DOMESTICUS var. *nucipersica*

Peach yellows. Hartzell. New York. 1935.

PRUNUS MYROBALAN

Yellows. Manns. Delaware. 1936.

Little peach. Manns. Delaware. 1936.

PRUNUS SALICINA

Peach yellows. Hartzell. New York. 1935.

Little peach. Manns. Delaware. 1936.

PYRUS sp.

Infectious variegations of apple foliage. Vibert. France. 1935.

Mosaic. Thomas. California. 1937. Reports that this disease is transmissible from *Pyrus malus* to *Coloneaster harreviana*, *Eriobotrya Japonica*, *Photinia arbutifolia* and in one case to *Sorbus pallescens*.

PYRUS AUCUPARIA

Variegations. Pyrus virus 1. Atanosoff. Bulgaria. 1935.

PYRUS COMMUNIS

Apple mosaic (Pyrus virus 2).

PYRUS CYDONIA

Apple mosaic (Pyrus virus 2).

RUBUS ALLEGHENIENSIS

Mosaic (rare). Cooley. Western New York. 1936.

Streak. Cooley. Western New York. 1936.

RUBUS OCCIDENTALIS

Mosaic (rare). Cooley. Western New York. 1936.

Leaf curl (rare) Cooley. Western New York. 1936.

SORBUS PALLESCENS

Mosaic of apple. See *Pyrus*.

RUTACEAE

CITRUS sp.

Corrugations or ribbings of lemons. Casella. Italy. 1933.

Not proved to be due to a virus.

SCROPHULARIACEAE

LINARIA VULGARIS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

PENTSTEMON sp.

Mosaic (cucumber virus 1). K. M. Smith. England. 1937.

VERONICA OFFICINALIS

Tobacco mosaic virus 1. Holmes. New Jersey. 1937.

SOLANACEAE

BROWALLIA SPECIOSA var. *major*

Tobacco mosaic virus 1. Holmes. New Jersey. I. 1937.

CAPSICUM sp.

Virus F (same as tuber blotch and Monocrat virus). Clinch, Loughnane & Murphy. Ireland. 1936. Also reported from Australia by Bald in 1937.

Bunchy top of tomato. McClean. South Africa. I. 1935.

CAPSICUM FRUTESCENS GROSSUM

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

DATURA METELOIDES

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

DATURA STRAMONIUM

Virus F (same as tuber blotch and Monocrat virus). Clinch, Loughnane & Murphy. Ireland. 1936.

Streak (spotted wilt). Snyder & Thomas. California. 1936.

This is a combination of streak with pea virus 1 and pea virus 3.

DATURA TATULA

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

LYCOPERSICUM ESCULENTUM

Tomato ring mosaic streak.

Tomato bushy stunt. *Lycopersicum* virus 4. Ainsworth. England. 1933.

Enation mosaic (fern leaf type). Ainsworth. England. 1935.

Due to a virus related to common tomato mosaic virus.

Fern leaf, which may be different from the fern leaf in America. Ainsworth. England. 1935. It was reported as a new disease. The virus appears to have about the same host range

as tobacco virus 1 and it is thought that it should be considered a strain.

A virus disease. Shapovalov & Dufrenoy. France. 1936.
Also attacks *Callistephus sinensis*, *Dahlia* sp. *Nicotiana tabacum*.
Transmitted by *Thrips tabaci*.

Spotted wilt of tomato. Brittlebank. 1919. This corrects the date of the former record.

Leaf curl. Pal & Tandon. India. 1937. See *N. tabacum*.

LYCOPERSICON PIMPINELLIFOLIUM

Bunchy top of tomato. McClean. South Africa. I. 1935.

NICOTIANA BIGLOVII

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.
See *Brassica*.

NICOTIANA CALYCIFLORA

A new mosaic of cabbage. Larson & Walker. Wisconsin. 1937.
See *Brassica*.

NICOTIANA GLUTINOSA

Streak (spotted wilt). Snyder & Thomas. California. 1936.
This is a combination of streak virus with pea virus 1 and pea virus 3.

Leaf curl. Pal & Tandon. India. 1937. See *N. tabacum*.

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA LANGSDORFII

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA LONGIFLORA

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA MUALTIVALVIS

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA QUADRIALVIS

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA REPANDA

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA RUSTICA

Yellow dwarf of potato. Black. New York. I. 1937.

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

Leaf curl. Pal & Tandon. India. 1937. See *N. tabacum*.

NICOTIANA SYLVESTRIS

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

NICOTIANA TABACUM

A virus disease. Shapovalov. France. 1936. Transmitted by *Thrips tabaci*.

Big bud. New South Wales. 1936.

Ring spot No. 2. Price. New Jersey. 1936.

Virus F (same as tuber blotch and Monocrat virus). Clinch, Loughnane & Murphy. Ireland. 1936.

Yellow dwarf. Hill. Australia. 1937.

Ruffle leaf. Lehman. North Carolina. N. 1937.

A new mosaic of cabbage. Larsen & Walker. Wisconsin. 1937.

Leaf curl (five types due to four distinct viruses A, B, C, D and mixtures of two or more known as X and transmissible to all Turkish varieties and to *N. rustica*, *N. glutinosa*, *Solanum nigrum*, *Lycopersicum esculentum* and *Petunia* sp.) Pal & Tandon. India. 1937.

Bergerae ringspot. Virus 14.

Tomato streak. *Lycopersicum* virus 1.

Hyoscyamus mosaic. Hy virus 1.

Datura virus 1. K. M. Smith. England. 1937.

Ruffle leaf. Lehman. North Carolina. 1937. Resembles "kroepoek" of South African and Java.

Yellow mottle. Putman. Canada 1937. A member of the latent or X virus group.

PETUNIA sp.

Virus F (same as tuber blotch and Monocrat virus). Clinch, Loughnane & Murphy. Ireland. 1936.

Leaf curl. Pal & Tandon. India. 1937. See *N. tabacum*.

PHYSALIS (two species)

Bunchy top of tomato. McClean. South Africa. I. 1935.

PHYSALIS PERUVIANA

Spotted wilt of tomato. K. M. Smith. England. 1936.

SCHIZANTHUS PINNATUS

Spotted wilt of tomato. Taubenhaus. Texas. 1936.

SCHIZANTHUS RETUSUS

Witches' broom caused by an attenuated strain of potato Y virus Salaman. England. 1937.

SOLANUM (7 species)

Bunchy top of tomato. McClean. South Africa. I. 1937.

SOLANUM CAROLINENSE

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

SOLANUM DULCAMARA

Aucuba mosaic of potato. Clinch, Loughnane & Murphy. Ireland. 1936.

SOLANUM ELAEAGNIFOLIUM

Mosaic. Young. Altstatt & Harrison. Texas. 1937 (1938).

SOLANUM NIGRUM

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

Virus F. Bald. Australia. 1937.

Leaf curl. Pal & Tandon. India. 1937. See *N. tabacum*.

SOLANUM NODIFLORUM

Virus F (same as tuber blotch and Monocrat virus). Clinch, Loughnane & Murphy. Ireland. 1936.

SOLANUM ROSTRATUM

Curly top of sugar beet. Taubenhaus & Altstatt. Texas. 1936.

SOLANUM TRIFLORUM

Curly top of sugar beet. Carter. California. 1930.

SOLANUM TUBEROSUM

Virus F (same as tuber blotch and Monocrat virus). Clinch, Loughnane & Murphy. Ireland. 1936. Also Bald. Australia. 1937.

Tuber blotch virus (*Solanum virus* 8).

Spring head (same as stekelkoffen in Holland, curly dwarf and bukett disease). Result of mixture of mild mosaic virus and stipplestreak (acropetal necrosis) virus. Botjes. Holland. 1937.

NOTE: Reddick (1936) reported that acropetal necrosis virus was the same as vein banding virus.

NOTE: Correction: Viruses Hy. II and Hy. IV may be regarded as strains of potato mosaic virus. Virus Hy. III is entirely different and does not attack potato. Hy. IV may be same as potato virus X. This correction of the second supplement is made in accordance with request from M. A. Watson.

THEACEAE

THEA sp.

Curly leaf or Phloem disease. Gadd. Ceylon 1936.

THYMELACEAE**DAPHNE** sp.

Greening (?) New South Wales. 1935.

Mosaic (?) New South Wales. 1935.

TROPAEOLACEAE**TROPAEOLIUM** MINUS

Curly top of sugar beet. Taubenhause & Altstatt. Texas. 1936.

UMBELLIFEREAE**APIUM** GRAVEOLENS

Mosaic. New South Wales. 1935.

DAUCUS CAROTA

Yellows. Conn. & New York.

VIOLACEAE**VIOLA** CORNUTA

Mosaic (cucumber virus 1). K. M. Smith. England. 1937.

VIOLA ODORATA

Curly top of sugar beet. Taubenhause & Altstatt. Texas. 1936.

VIOLA TRICOLOR

Cucumber mosaic virus 1. K. M. Smith. England. 1936.