



Department of
Primary Industries and
Regional Development

Journal of the Department of Agriculture, Western Australia, Series 3

Volume 8
Number 4 July- August 1959

Article 9

7-1959

A revised list of vegetables diseases recorded in Western Australia

S. C. Chambers

Follow this and additional works at: https://library.dpird.wa.gov.au/journal_agriculture3

Recommended Citation

Chambers, S. C. (1959) "A revised list of vegetables diseases recorded in Western Australia," *Journal of the Department of Agriculture, Western Australia, Series 3*: Vol. 8: No. 4, Article 9.
Available at: https://library.dpird.wa.gov.au/journal_agriculture3/vol8/iss4/9

This article is brought to you for free and open access by the Agriculture at Digital Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 3 by an authorized administrator of Digital Library. For more information, please contact library@dpird.wa.gov.au.

A Revised List of Vegetable Diseases Recorded in Western Australia

Compiled from Departmental Records by S. C. CHAMBERS, M.Sc., Plant Pathologist

THIS list of vegetable diseases constitutes a revision of portion of the census published by Carne (1925) and added to by the same author in 1927. It contains also records of diseases identified in the period between these earlier publications and December 31, 1957.

The list is arranged alphabetically according to the botanical names of the host plants. In general, the viral, bacterial, fungal and nematodal diseases and physiological disorders of each host are listed in that order. The locality and date of the first record in each instance is also given whenever possible.

A list of common names of host plants has been appended to facilitate reference.

Host	Cause	Common Name	FIRST RECORD		
			Place	Month	Year
<i>Allium ascalonicum</i> L. (SHALLOT)	<i>Peronospora destructor</i> (Berk.) Casp.	Downy Mildew	Albany	August	1949
	<i>Pyrenochaeta terrestris</i> (Hansen) Gorenz, {	Red Root	.....	November	1932
	Walker & Larsen	Pink Root	.....	.....	.....
	Pathogen Not Recorded	Storage Rot	Kronkup	May	1955
<i>Allium cepa</i> L. (ONION)	Pathogen Not Recorded	Bacterial Disease	.....	August	1918
	Pathogen Not Recorded	Bacterial Rot of Leaves	.....	October	1926
	<i>Aspergillus niger</i> v. Teigh.	Black Mould	Mt. Lawley	.....	1934-35
	<i>Collectotrichum circinans</i> (Berk.) Vogl.	Smudge	Glen Forest	.....	1931
	<i>Fusarium</i> sp.	Bulb Rot	Spearwood	February	1924
	<i>Peronospora destructor</i> (Berk.) Casp.	Downy Mildew	Peel Estate	August	1919
	* <i>Pyrenochaeta terrestris</i> (Hansen) Gorenz, {	Red Root	.....	.....	1919
	Walker & Larsen.	Pink Root	Spearwood	May	1919
	<i>Stemphylium botryosum</i> Wallr.	Leaf Mould	.....	November	1918
	† <i>Meloidogyne</i> sp.	Root Knot Eelworm	.....	.....	1919
	Non Parasitic	Sun Scald	Metropolitan	January	1955
<i>Apium graveolens</i> L. (CELERY)	Pathogen Not Recorded	Storage Rot	Dunsborough	May	1955
	? Virus	Witch's Broom	Balcatta	July	1955
	? <i>Erwinia caratovora</i> (Jones) Holland	Bacterial Soft Rot	Kenwick	June	1956
	<i>Cercospora apii</i> Fres.	Early Blight	Perth	.....	1935
	<i>Sclerotinia</i> ? <i>sclerotiorum</i> (Lib.) de By	Leaf Blight	Osborne Park	September	1957
	<i>Septoria apii</i> (Briosi & Cav.) Chester	Sclerotinia Rot	.....	.....	1923
	.....	Late Blight	Osborne Park	.....	1956
	<i>Meloidogyne javanica</i> (Treub) Chitwood	Leaf Spot	Osborne Park	April	1957
	Non Parasitic	Root Knot Eelworm	Osborne Park	September	1957
	.....	Pithiness	.....	.....	.....

<i>Beta vulgaris</i> L. (RED BEET)	<i>Streptomyces scabies</i> (Thaxt.) Waks & Henrici	Common Scab	.....	January	1954
	? <i>Fusarium</i> sp.	Root Rot	Middle Swan	March	1955
	<i>Sclerotinia</i> sp.	Sclerotinia Rot	Greenmount	November	1955
	<i>Uromyces betae</i> (Pers.) Lev.	Rust	Fremantle	October	1924
	<i>Heterodera schachtii</i> A. Schmidt	Sugar Beet Eelworm	.....	.....	1932-33
	† <i>Meloidogyne javanica</i> (Treub) Chitwood	Root Knot Eelworm	.....	.....	1919

<i>Beta vulgaris</i> L. var. <i>ciela</i> L. (SILVER BEET)	§ <i>Cucumber Mosaic Virus</i>	Mosaic	Osborne Park	October	1945
	<i>Cercospora beticola</i> Sacc.	Leaf Spot	Balcatta	.....	1943
	<i>Rhizoctonia</i> sp.	Crown and Root Rot	Cottesloe	January	1955
	<i>Uromyces betae</i> (Pers.) Lev.	Rust	Osborne Park	August	1957
	† <i>Meloidogyne javanica</i> (Treub) Chitwood	Root Knot Eelworm	Metropolitan	.....	1944

<i>Beta vulgaris</i> L. var. <i>macrorrhiza</i> (SUGAR BEET OR MANGEL)	? <i>Cercospora beticola</i> Sacc.	Leaf Spot	Boyanup	July	1923
	<i>Uromyces betae</i> (Pers.) Lev.	Rust	Fremantle	October	1924
	Pathogen Not Recorded	Damping Off	Albany	December	1925

* Correct Identity Established, July, 1930.

† Recorded as *Heterodera radiculicola* (Greef) Mull.

‡ Identified 1955. Previously Recorded as *Heterodera radiculicola* (Greef) Mull.

§ Confirmed 1955.

Vegetable Diseases—continued.

Host	Cause	Common Name	FIRST RECORD		
			Place	Month	Year
<i>Brassica napobrassica</i> Mill (SWEDE)	<i>Xanthomonas campestris</i> (Pam.) Dows.	Black Rot	Lower Chittering	September	1947
	<i>Albugo candida</i> (Pers. ex Chev.) Kuntze	White Rust	Metropolitan	....	1940
	<i>Cercospora albo-maculans</i> Ell. & Ev.	White Leaf Spot	Bullsbrook	....	1933-34
	<i>Cercospora sp.</i>	Byford	....	May	1947
	<i>Phoma lingam</i> (Tode ex. Fr.) Desm. {	Black Leg	Bullsbrook	November	1956
	<i>Phyllosticta sp.</i>	Dry Rot	Wooroloo	July	1956
<i>Brassica oleracea</i> L. var. <i>acephala</i> D.C. (KALE)	Non Parasitic	Internal Cork	Pickering Brook	....	1934-35
	<i>Phoma lingam</i> (Tode ex. Fr.) Desm.	Black Leg	Bluff Point	....	1936-37
<i>Brassica oleracea</i> L. var. <i>botrytis</i> CAULIFLOWER)	<i>Cauliflower Mosaic Virus</i>	Mosaic	Nedlands	....	1943
	? <i>Erwinia carotovora</i> (Jones) Holland	Bacterial Soft Rot	Spearwood	May	1955
	<i>Pseudomonas maculicola</i> (McCull.) Stevens {	Bacterial Leaf Spot	Katanning	August	1931
	<i>Xanthomonas campestris</i> (Pam.) Dows.	McCulloch's Leaf Spot	....	April	1924
	<i>Alternaria brassicae</i> (Berk.) Sacc.	Black Rot	Coogee	....	1952
	<i>Cephalothecium roseum</i> Cda.	Leaf Spot	Balcatta	....	1925
	<i>Mycosphaerella brassicicola</i> (Fr. ex Duby) Lindau	Pink Mould	Capel	November	1923
	<i>Pellicularia filamentosa</i> (Pat.) Rogers. {	Ring Spot	Boyanup	July	1923
	<i>Peronospora parasitica</i> (Pers.) ex Fr.	Damping Off	Osborne Park	March	1947
	<i>Phoma lingam</i> (Tode ex. Fr.) Desm.	Wire Stem	....	....	1935-36
	<i>Phyllosticta sp.</i>	Downy Mildew	Gingin	....	1924
	<i>Plasmodiophora brassicae</i> Woron.	Black Leg	Coogee	April	1956
	<i>Sclerotinia sclerotiorum</i> (Lib.) de By.	Club Root	Bullsbrook	June	1943
	<i>Heterodera schachtii</i> A. Schmidt.	Sclerotinia Rot	Albany	March	1941
	Non Parasitic	Sugar Beet Eelworm	West Swan	August	1957
<i>Brassica oleracea</i> L. var. <i>capitata</i> L. (CABBAGE)	Non Parasitic	Oedema	Spearwood	April	1925
	Non Parasitic	Frost Injury	Belmont	August	1925
	Non Parasitic	....	Balcatta	September	1957
	? <i>Erwinia carotovora</i> (Jones) Holland	Bacterial Soft Rot	Osborne Park	January	1944
	<i>Pseudomonas maculicola</i> (McCull.) Stevens {	Bacterial Leaf Spot	....	....	1930
	<i>Xanthomonas campestris</i> (Pam.) Dows.	McCulloch's Leaf Spot	....	....	1921
	<i>Mycosphaerella brassicicola</i> (Fr. ex Duby) Lindau	Black Rot	Boyanup	July	1923
	<i>Pellicularia filamentosa</i> (Pat.) Rogers {	Ring Spot	....	....	1923
	<i>Peronospora parasitica</i> (Pers.) ex Fr.	Damping Off	Balcatta	January	1957
	<i>Phoma lingam</i> (Tode ex. Fr.) Desm.	Wire Stem	....	....	1945
	<i>Plasmodiophora brassicae</i> Woron.	Downy Mildew	Wanneroo	July	1924
	<i>Sclerotinia sclerotiorum</i> (Lib.) de By.	Black Leg	Coogee	April	1918
	<i>Heterodera schachtii</i> A. Schmidt.	Club Root	....	....	1955
	* <i>Meloidogyne sp.</i>	Sclerotinia Rot	....	May	1925
	Non Parasitic	Sugar Beet Eelworm	Spearwood	April	1919
<i>Brassica oleracea</i> L. var. <i>gemmifera</i> Zenker (BRUSSELS SPROUTS)	Non Parasitic	Root Knot Eelworm	Fremantle	December	1928
	Non Parasitic	Oedema	Gosnells	September	1928
	<i>Cabbage Black Ringspot Virus</i> Smith	Black Ringspot Virus	Bedfordale	....	1956
	<i>Pseudomonas ? syringae</i> Van Hall	....	Bedfordale	....	1955
	<i>Xanthomonas campestris</i> (Pam.) Dows.	Black Rot	....	....	1955
	<i>Botrytis cinerea</i> Fr.	Grey Mould	Bedfordale	August	1956
<i>Brassica rapa</i> L. (TURNIP)	<i>Plasmodiophora brassicae</i> Woron.	Club Root	Bedfordale	June	1949
	<i>Sclerotinia sclerotiorum</i> (Lib.) de By.	Sclerotinia Rot	Bedfordale	February	1946
	<i>Xanthomonas campestris</i> (Pam.) Dows.	Black Rot	Bayswater	May	1956
	<i>Albugo candida</i> (Pers. ex Chev.) Kuntze	White Rust	Metropolitan	....	1940
	? <i>Cercospora albo-maculans</i> Ell. & Ev.	White Leaf Spot	Wooroloo	July	1956
	<i>Plasmodiophora brassicae</i> Woron.	Club Root	....	....	1921
<i>Capsicum annuum</i> L. (PEPPER)	* <i>Meloidogyne sp.</i>	Root Knot Eelworm	Perth Market	December	1919
	Non Parasitic	Internal Cork	Pickering Brook	....	1934-35
	Non Parasitic	Heat Injury	Carnarvon	January	1956
	<i>Fusarium oxysporum f. niveum</i> (E.F. Sm) Snyder & Hansen	Fusarium Wilt	Maylands	January	1926
	Non Parasitic	Heat Injury to Fruit	Scarborough	January	1955
	<i>Cucurbit Mosaic Virus</i>	Mosaic	Balcatta	October	1952
<i>Citrullus vulgaris</i> Schrad. (WATER MELON)	<i>Erysiphe cichoracearum</i> DC.	Powdery Mildew	Mt. Helena	February	1955
	<i>Pellicularia rolfsii</i> (Curzi) West.	Fruit Rot	Cannington	February	1949
	<i>Meloidogyne sp.</i>	Root Knot Eelworm	Mt. Lawley	January	1957
	Non Parasitic	Non Setting of Fruit	Mt. Lawley	November	1930
	<i>Cucurbit Mosaic Virus</i>	Mosaic	Balcatta	October	1952
	<i>Pseudomonas lachrymans</i> (E.F. Sm. & Bryan) Carsner	Angular Leaf Spot	Balcatta	May	1956
<i>Cucumis melo</i> L. (ROCK MELON OR CANTALOUPE)	† <i>Erysiphe cichoracearum</i> DC.	Powdery Mildew	Byford	....	1931-32
	† <i>Fusarium sp.</i>	Fusarium Wilt	Wooroloo	January	1955
	† <i>Meloidogyne javanica</i> (Treub) Chitwood	Root Knot Eelworm	Carnarvon	July	1928
	Cause Unknown	Fasciation	Fremantle	December	1957
	<i>Cucurbit Mosaic Virus</i>	Mosaic	Balcatta	October	1952
	<i>Pseudomonas lachrymans</i> (E.F. Sm. & Bryan) Carsner	Angular Leaf Spot	Balcatta	May	1956
<i>Cucumis sativus</i> L. (CUCUMBER)	† <i>Erysiphe cichoracearum</i> DC.	Powdery Mildew	Byford	....	1931-32
	† <i>Fusarium sp.</i>	Fusarium Wilt	Wooroloo	January	1955
	† <i>Meloidogyne javanica</i> (Treub) Chitwood	Root Knot Eelworm	Carnarvon	July	1928
	Cause Unknown	Fasciation	Fremantle	December	1957
	<i>Cucurbit Mosaic Virus</i>	Mosaic	Balcatta	October	1952
	<i>Pseudomonas lachrymans</i> (E.F. Sm. & Bryan) Carsner	Angular Leaf Spot	Balcatta	May	1956

* Recorded as *Heterodera radicola* (Greef) Mull.

† Identified 1956, Previously Recorded as *Oidium sp.*

‡ Identified 1956, Previously Recorded as *Heterodera radicola* (Greef) Mull.

Vegetable Diseases—continued.

Host	Cause	Common Name	FIRST RECORD		
			Place	Month	Year
<i>Cucurbita moschata</i> Dene. (VEGETABLE MAR- ROW)	<i>Cucumber Mosaic Virus</i> <i>Botrytis cinerea</i> Fr. <i>Erysiphe cichoracearum</i> DC. Non Parasitic	Mosaic Grey Mould Powdery Mildew Non Setting of Fruit	Perth Osborne Park South Perth Como ....	..... October February November	1953 1955 1925 1930
<i>Curcubita pepo</i> L. (PUMPKIN)	<i>Erysiphe cichoracearum</i> DC. <i>Fusarium</i> sp. <i>Meloidogyne</i> sp. Non Parasitic	Powdery Mildew Root Rot Root Knot Eelworm Non Setting of Fruit Heat Injury	Osborne Park Herne Hill Metropolitan Serpentine .... .....	..... January February February January	1923 1931 1957 1955 1956
<i>Daucus carota</i> L. (CARROT)	<i>Carrot Motley Dwarf Virus</i> <i>Erwinia carotovora</i> (Jones) Holland <i>Xanthomonas carotae</i> (Kendr.) Dows. <i>Alternaria radicina</i> Meier, Drechsler & Eddy <i>Cercospora</i> sp. <i>Fusarium</i> sp. † <i>Meloidogyne javanica</i> (Treub) Chitwood	Motley Dwarf Bacterial Soft Rot Bacterial Blight Black Rot Leaf Spot Fusarium Rot Root Knot Eelworm	Osborne Park Osborne Park Osborne Park Balcatta Osborne Park Palmyra	July November June ?February June August	1944 1955 1957 1943 1944 1957 1921
<i>Ipomoea batatas</i> (L) Lam (SWEET POTATO)	<i>Monilochaetes infuscans</i> Ell. & Halst. ex Harter	Scurf	Herdsman's Lake	March	1945
<i>Lactuca sativa</i> L. (LETTUCE)	<i>Lettuce Mosaic Virus</i> <i>Tomato Spotted Wilt Virus</i> Samuel Bald & Pittman <i>Erwinia carotovora</i> (Jones) Holland <i>Botrytis cinerea</i> Fr. <i>Bremia lactucae</i> Reg. <i>Pellicularia filamentosa</i> (Pat.) Rogers <i>Pythium</i> sp. <i>Sclerotinia minor</i> Jagger <i>Sclerotinia sclerotiorum</i> (Lib.) de By. <i>Septoria lactucae</i> Pass. <i>Stemphylium botryosum</i> Wallr. † <i>Meloidogyne javanica</i> (Treub) Chitwood Non Parasitic	Lettuce Mosaic Spotted Wilt Bacterial Soft Rot Grey Mould Downy Mildew Bottom Rot Damping Off Pythium Stunt Damping Off Drop Sclerotinia Rot Drop Sclerotinia Rot Septoria Leaf Spot Leaf Spot Root Knot Eelworm Frost Injury Tip Burn	Balcatta Kalgoorlie Perth Arrino Spearwood Osborne Park Osborne Park Busselton Busselton Fremantle Balcatta Balcatta Maida Vale	July December August August March October March May December June June March	1952 1937-38 1925 1926 1934 1949 1947 1955 1955 1950 1954 1932-33 1954 1929
<i>Lycopersicon esculentum</i> Mill (TOMATO)	<i>Cucumber Mosaic Virus</i> <i>Tobacco Mosaic Virus</i> , Clinton <i>Tobacco Mosaic Virus</i> , <i>Tomato Aucuba</i> <i>Mosaic Virus Strain</i> <i>Tobacco Mosaic Virus</i> , <i>Tomato Streak Virus</i> <i>Strain</i> <i>Tomato Big Bud Virus</i> Samuel Bald & Eardley † <i>Tomato Spotted Wilt Virus</i> , Samuel Bald & Pittman <i>Corynebacterium michiganense</i> (E.F. Sm.) Jensen <i>Pseudomonas solanacearum</i> E.F. Sm. <i>Xanthomonas vesicatoria</i> (Doidge) Dows. <i>Alternaria solani</i> (Ell. & Mart.) Jones & Grout <i>Alternaria tomato</i> (Cke.) G. F. Weber <i>Botrytis cinerea</i> Fr. <i>Fusarium oxysporum</i> F. <i>lycopersici</i> (Sacc.) Snyder & Hansen ? <i>Macrophomina phaseoli</i> (Maub.) Ashby ? <i>Oospora</i> sp. <i>Pellicularia filamentosa</i> (Pat.) Rogers <i>Pellicularia rofsii</i> (Curzi) West <i>Penicillium</i> sp. <i>Phoma destructiva</i> Plowr. <i>Phytophthora</i> ? <i>parasitica</i> Dast. <i>Phytophthora</i> sp. § <i>Pleospora lycopersici</i> El. & Em. Marchal. <i>Rhizopus</i> sp. <i>Sclerotinia minor</i> Jagger <i>Sclerotinia sclerotiorum</i> (Lib.) de By. <i>Septoria lycopersici</i> Speg. || <i>Verticillium dahliae</i> Kleb. <i>Verticillium</i> ? <i>albo-atrum</i> Reinke & Berth. † <i>Meloidogyne javanica</i> (Treub) Chitwood Non-Parasitic	Fern Leaf Ordinary or Mild To- mato Mosaic Aucuba Mosaic Streak Big Bud Spotted Wilt Bacterial Canker Bacterial Wilt Bacterial Spot Target Spot Early Blight Nailhead Spot Grey Mould Fusarium Wilt Ashy Stem Blight Rhizoctonia Stem Canker Southern Blight Penicillium Fruit Rot Phoma Rot Buck Eye Rot Collar Rot Pleospora Fruit Rot Rhizopus Soft Rot Stem Rot Stem Rot Septoria Leaf Spot Verticillium Wilt Verticillium Wilt Root Knot Eelworm Blossom End Rot Blotchy Ripening	Guildford Geraldton Geraldton Geraldton Geraldton Bullsbrook Wanneroo Wanneroo Metropolitan Geraldton Geraldton Geraldton Geraldton West Leederville ? Bullsbrook Geraldton Fremantle Busselton Geraldton	June May May June February December February August September July October March October June September September September September October August February November June March	1952 1953 1957 1928 1926 1923 1945 1925 1947 1911 1948 1954 1923 1930 1924 1931 1955 1952 1935 1947 1941 1941 1948 1949 1929 1925 1926 1949 1916 1925 1938-39

* Confirmed Osborne Park April, 1955.

† Identified 1955, Previously recorded as *Heterodera radicolica* (Greef) Mull.

‡ Identified 1934, Previously Recorded as Spotted Wilt (Cause Unknown).

§ Identified 1952, Previously Recorded as *Stemphylium* sp.

|| Confirmed Balcatta, 1950.
 || Identified 1950. Provisional

¶ Identified 1958, Previously Recorded as *Heterodera radicola* (Greef) Mull.

Vegetable Diseases—continued.

Host	Cause	Common Name	FIRST RECORD		
			Place	Month	Year
<i>Lycopersicon esculentum</i> Mill (TOMATO)—contd.	Non-Parasitic Non-Parasitic Non-Parasitic Non-Parasitic Pathogen Not Recorded	Cracking of Fruit Leaf Roll Non Setting of Fruit Sectorial Chimera Sun Scald of Fruit Damping Off	Forrestfield Harvey Geraldton Coogee	March January January September June	1931 1955 1929 1929 1924-25 1955
<i>Pastinaca sativa</i> L. (PARSNIP)	<i>Phyllachora pastinacae</i> (West.) Rostr. <i>Meloidogyne javanica</i> (Treub) Chitwood Cause Unknown	Phyllachora Leaf Spot Root Knot Eelworm Root Bronzing	Spearwood Osborne Park Osborne Park	July April November	1934 1916 1957
<i>Petroselinum hortense</i> Hoffm (PARSLEY)	<i>Meloidogyne sp.</i>	Root Knot Eelworm	City Beach	February	1955
<i>Phaseolus vulgaris</i> L. (BUTTER FRENCH, NAVY AND POLE BEAN)	<i>Bean Mosaic Virus</i> Stewart & Reddick <i>Bean Yellow Mosaic Virus</i> <i>Pseudomonas phaseolicola</i> (Burk.) Dows. <i>Xanthomonas phaseoli</i> (E.F.S.) Dows. <i>Alternaria fasciculata</i> (Cke. & Ell.) Jones & Grout <i>Ascochyta sp.</i> <i>Collectotrichum lindemuthianum</i> (Sacc. & Magn.) Bri. & Cav. <i>Fusarium solani f. phaseoli</i> (Burk.) Snyder & Hansen <i>Macrophomina phaseoli</i> (Maub.) Ashby <i>Pellicularia filamentosa</i> (Pat.) Rogers { <i>Pellicularia rolfsii</i> (Curzi) West <i>Pythium debaryanum</i> Hesse. <i>Sclerotinia sclerotiorum</i> (Lib.) de By. <i>Uromyces phaseolorum</i> De By. * <i>Meloidogyne javanica</i> (Treub) Chitwood Genetic Non Parasitic Non Parasitic Non Parasitic Pathogen Not Recorded	Common Bean Mosaic Bean Yellow Mosaic Halo Blight Common Blight Leaf Spot Fusarium Root Rot Ashby Stem Blight Collar Rot Damping Off Sclerotium Foot Rot Rust Sclerotinia Disease Heat Scorch Non Setting of Beans Sun Scald Pre Emergence Damp-in Off	Balcatta Balcatta Maddington Fremantle Balcatta Kelmescott Gosnells Perth Perth Armadale Fremantle Nedlands Woorloo Denmark Helena Vale .....	..... ..... November September June July March December March February June June June December October March February February January	1944 1954 1930 1930 1945 1956 1901 1931 1925 1941 1926 1921 1928 1929 1917 1945 1930 1930 1955 1955
<i>Pisum sativum</i> L. (GARDEN PEA)	† <i>Pea Mosaic Virus</i> Doolittle & Jones <i>Tomato Spotted Wilt Virus</i> Samuel, Bald & Pittman <i>Pseudomonas pisi</i> Sackett <i>Ascochyta pisi</i> Lib. <i>Erysiphe polygoni</i> DC. emend. Salm. <i>Fusarium ? solani f. pisi</i> (F. R. Jones), Snyder & Hansen <i>Fusarium ? oryziporum f. pisi</i> (Linford), Snyder & Hansen <i>Mycosphaerella pinodes</i> (Berk. & Blox.) Stone <i>Mycosphaerella tulasnei</i> (Jancz.) Lindau <i>Pellicularia filamentosa</i> (Pat.) Rogers <i>Peronospora viciae</i> (Berk.) Casp. <i>Septoria pisi</i> West. † <i>Meloidogyne sp.</i> Genetic Non Parasitic Non Parasitic Non Parasitic Pathogen Not Recorded Pathogen Not Recorded	Pea Mosaic Spotted Wilt Bacterial Blight Black Spot Powdery Mildew Fusarium Root Rot Fusarium Wilt Leaf Spot Leaf Blotch Rhizoctonia Root and Stem Rot Downy Mildew Septoria Blotch Root Knot Eelworm Leaf Variegation Frost Injury Heat Injury Non Setting of Peas Damping Off Stem Canker	? Geraldton Pinjarra Boypur Brook Baker's Hill Warooa Jarrahdale North Perth Osborne Park Beverley Pickering Brook Bayswater Nedlands Metropolitan Metropolitan Norsemann Woodanilling	August September January January October August March October September June February January March August	1929 1935-36 1943 1926 1932 1926 1930 1914 1918 1926 1924 1935-36 1928 1945 1955 1930 1955 1944 1927
<i>Raphanus sativus</i> L. (RADISH)	<i>Albugo candida</i> (Pers. ex Chev.) Kuntze <i>Plasmidiophora brassicae</i> Woron.	White Rust Club Root	Osborne Park Perth .....	..... .....	1944 1931-32
<i>Rheum rhoponticum</i> L. (RHUBARB)	Pathogen Not Recorded <i>Ervinia carotovora</i> (Jones) Holland <i>Armillaria mellea</i> (Vahl) Quel. § <i>Ascochyta rhei</i> Ell. & Ev. Phytophthora sp. <i>Puccinia phragmites</i> (Schum.) Korn. <i>Ramularia ? rhei</i> Allesch. ¶ <i>Meloidogyne javanica</i> (Treub) Chitwood Non Parasitic	? Bacterial Root Rot Bacterial Soft Rot Root Rot Leaf Spot Crown Rot Rust Ramularia Leaf Spot Root Knot Eelworm Heat Injury	Claremont Spearwood Osborne Park Perth Leederville	February March October November June January	1926 1928 1919 1924 1924-25 1918 1957 1916 1956

* Identified 1958. Previously recorded as *Heterodera radicolica* (Greef) Mull.

† Confirmed 1943.

† Recorded as *Heterodera radiculicola* (Greef) Mull.

§ Identified 1954. Previously Recorded as *Phyllosticta* sp.

|| Identified 1955. Previously Recorded as *Heterodera radiculicola* (Greef) Mull.

¶ Identified 1946. Previously Recorded as *Heterodera radiculicola* (Greef) Mull.

Vegetable Diseases—continued.

Host	Cause	Common Name	FIRST RECORD		
			Place	Month	Year
<i>Solanum melongena</i> L. (EGG PLANT)	? <i>Erwinia carotovora</i> (Jones) Holland	Bacterial Soft Rot	Carnarvon	January	1956
<i>Solanum tuberosum</i> L. (POTATO)	<i>Potato Leaf Roll Virus</i> Appel.	Leaf Roll	Denmark	April	1927
	<i>Potato Purple Top Wilt Virus</i>	Purple Top Wilt	Esperance	January	1956
	† <i>Potato Virus X</i> ....	.....	? Pinjarra	September	1926
	<i>Potato Virus Y</i>	Streak	Gosnells	September	1928
	<i>Potato Witch's Broom Virus</i> Hungerford & Dana	Witch's Broom ....	.....	May	1957
	‡ <i>Tomato Spotted Wilt Virus</i> Samuel, Bald & Pittman	Spotted Wilt	? North Perth....	October	1930
	<i>Erwinia carotovora</i> (Jones) Holland	Black Leg ....	.....	.....	1920
	<i>Pseudomonas solanacearum</i> E.F.Sm.	Bacterial Wilt ....	.....	.....	1920
	<i>Streptomyces scabies</i> (Thaxt.) Waks. & Henrici	Common Scab ....	.....	.....	1898
	<i>Alternaria solani</i> (Ell. & Mart.) Jones & Groul	Early Blight ....	.....	.....	1920
	<i>Armillaria mellea</i> (Vahl) Quel.	Target Spot ....	.....	.....	1924-25
	<i>Fusarium</i> sp.	Storage Disease	.....	.....	1920
	<i>Fusarium</i> sp.	Armillaria Tuber Rot	.....	.....	1920
	<i>Helicobasidium purpureum</i> (Tul.) Pat.	Wilt ....	.....	.....	1924-25
	<i>Pellicularia filamentosa</i> (Pat.) Rogers	Brown Ring ....	.....	.....	1931-32
	<i>Pellicularia rolfsii</i> (Curzi) West	Storage Rot ....	.....	.....	1911
	<i>Phoma</i> ? <i>tuberosa</i> Melh. Rosenb. & E. S. Schultz	Violet Root Rot	Maddington	June	1956
	<i>Phytophthora erythroseptica</i> Pethb.	Rhizoctonia ....	.....	March	1923
	<i>Phytophthora infestans</i> (Mont.) de By. {	Southern Blight	Lowden	June	1946
	<i>Sclerotinia minor</i> Jagger	.....	.....	.....	1932-33
	<i>Sclerotinia sclerotiorum</i> (Lib.) de By.	Late Blight	Harvey	June	1909
	<i>Spondylocadium atrovirens</i> Harz.	Irish Blight	Guildford	August	1932-33
	<i>Spongospora subterranea</i> (Wallr.) Lagerh.	Stem Canker ....	.....	.....	1923
	<i>Stysanus stemonitis</i> Cde.	Stem Canker ....	.....	.....	1949
	<i>Verticillium albo-atrum</i> Reinke & Berth.	Silver Scurf	Maylands	.....	1929
	* <i>Meloidogyne</i> ? <i>arenaria</i> (Neal) Chitwood	Powdery Scab	Hamel	.....	1932-33
	* <i>Meloidogyne</i> ? <i>incognita</i> acrida Chitwood	Surface Mould	Dardanup	.....	1916
	Non Parasitic	Verticillium Wilt	.....	.....	1930
	Non Parasitic	Root Knot Eelworm	Perth	.....	1920
	Non Parasitic	Black Heart	Dwellingup	January	1957
	Non Parasitic	Brown Fleck ....	.....	.....	1929
	Non Parasitic	Enlarged Lenticels	Palcatta	November	1928
	Non Parasitic	Frost Injury ....	.....	October	1957
	Non Parasitic	Injury from Tuber Dips	Bornholm	September	1920
	Non Parasitic	Growth Cracks	Spearwood	December	1920
	Non Parasitic	Hollow Heart	.....	.....	1920
	Non Parasitic	Spindling Sprout	.....	.....	1920
	Non Parasitic	Sun Scald	Zamia	December	1928
	Cause Unknown	Vascular Netting	.....	May	1955
<i>Soja max</i> Piper (SOYA BEAN)	<i>Pseudomonas phaseolicola</i> (Burk.) Dows.	Halo Blight	Nedlands	.....	1944
<i>Vicia faba</i> L. (BROAD OR TICK BEAN)	<i>Bean Yellow Mosaic Virus</i>	Bean Yellow Mosaic ....	.....	May	1956
	<i>Alternaria</i> sp.	Alternaria Leaf Spot	.....	.....	1913
	<i>Ascochyta fabae</i> Speg.	Leaf Pod and Stem Spot	South Perth	.....	1942
	§ <i>Botrytis cinerea</i> Fr.	Chocolate Spot	South Perth	October	1923
	<i>Botrytis</i> sp.	Grey Mould	Roleystone	.....	1942
	<i>Cercospora fabae</i> Fautr.	Leaf Pod and Stem Spot	South Perth	.....	1942
	<i>Cladosporium</i> sp.	Black Leaf Spot	South Perth	November	1923
	? <i>Phyllosticta</i> sp.	Black Leaf Spot	South Perth	August	1923
	<i>Pythium</i> ? <i>debarjanum</i> Hesse	.....	.....	July	1921
	<i>Uromyces fabae</i> (Pers.) de Bary	Broad Bean Rust	.....	October	1921
	<i>Meloidogyne</i> sp.	Root Knot Eelworm	Middle Swan	August	1955
	Non Parasitic	Flower Blackening	Metropolitan	August	1955
	Non Parasitic	Flower Drop	South Belmont	August	1956
	Pathogen Not Recorded	Damping Off	Riverton	June	1957
	Pathogen Not Recorded	Root Rot	Middle Swan	August	1955
<i>Zea mays</i> L. var. <i>saccharata</i> (SWEET CORN)	Non Parasitic	Leaf Scorch	Osborne Park	February	1956
	Pathogen Not Recorded	Leaf Spot	Osborne Park	February	1956

* Identified 1958. Previously Recorded as *Heterodera radicola* (Greef) Mull.

† Confirmed 1938.

‡ Confirmed 1937.

§ Identity established 1937-38.

APPENDIX

Common Names and Botanical Equivalents.

BEAN—

Broad or Tick—*Vicia faba* L.
Butter, French, Navy and Pole—
Phaseolus vulgaris L.
Soya—*Soja max* Piper.

BEET—

Red—*Beta vulgaris* L.
Silver—*Beta vulgaris* L. var. *cicla* L.
Sugar—*Beta vulgaris* L. var. *macrorrhiza*

BRUSSELS SPROUTS—*Brassica oleracea* L. var. *gemmifera* Zenker.

CABBAGE—*Brassica oleracea* L. var. *capitata* L.

CANTALOUPE—*Cucumis melo* L.

CARROT—*Daucus carota* L.

CAULIFLOWER—*Brassica oleracea* L. var. *botrytis* L.

CELERY—*Apium graveolens* L.

CUCUMBER—*Cucumis sativus* L.

EGG-PLANT—*Solanum melongena* L.

KALE—*Brassica oleracea* L. var. *acephala* DC.

LETTUCE—*Lactuca sativa* L.

MANGEL—*Beta vulgaris* L. var. *macrorrhiza*.

MARROW—*Cucurbita moschata* Dcne.

MELON—

Rock—*Cucumis melo* L.
Water—*Citrullus vulgaris* Schrad.

ONION—*Allium cepa* L.

PARSLEY—*Petroselinum hortense* Hoffn.

PARSNIP—*Pastinaca sativa* L.

PEA—*Pisum sativum* L.

PEPPER—*Capsicum annuum* L.

POTATO—*Solanum tuberosum* L.

PUMPKIN—*Cucurbita pepo* L.

RADISH—*Raphanus sativus* L.

RHUBARB—*Rheum rhaponticum* L.

SHALLOT—*Allium ascalonicum* L.

SWEDE—*Brassica napobrassica* Mill.

SWEET CORN—*Zea mays* L. var. *saccharata*.

SWEET POTATO—*Ipomoea batatas* (L.) Lam.

TOMATO—*Lycopersicon esculentum* Mill.

TURNIP—*Brassica rapa* L.

ACKNOWLEDGMENT

Grateful acknowledgment is made to Mr. H. L. Harvey, Senior Plant Pathologist for encouragement and constructive criticism in the preparation of this census.

REFERENCES

- Carne, W. M.—(1925). *J. Roy. Soc. W.A.* XI, 7; 43-68.
——— (1927). *Ibid* XIV, 3; 23-28.

SHEEP-KILLERS DESTROYED

Agriculture Protection Board trapper, B. K. Davies, recently destroyed 12 wild dogs in the area between Mundaring Weir and York, and most of them had the typical characteristics of pure-bred dingoes.

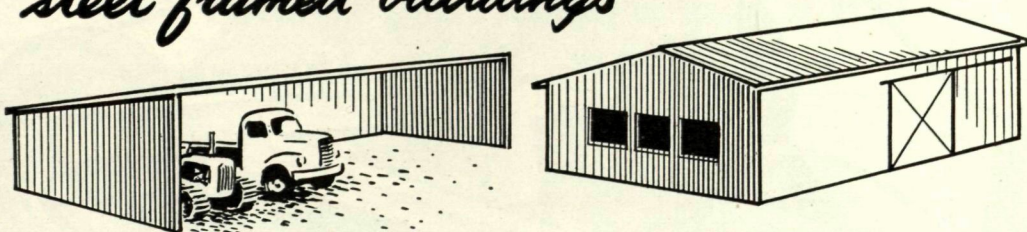
Included in this total were three dogs, which were trapped following a complaint of dogs killing sheep on farms to the south-west of York. The three included two females carrying 13 pups, and the other was described by the trapper as the biggest dog he has ever seen. It was a black male which was operating on a wide travelling circuit on which Mr. Davies estimated to be a three week schedule.

Mr. Nalder said that the trapper set his trap, nominated a day, over a week later, on which the dog would return, and trapped it exactly on schedule.

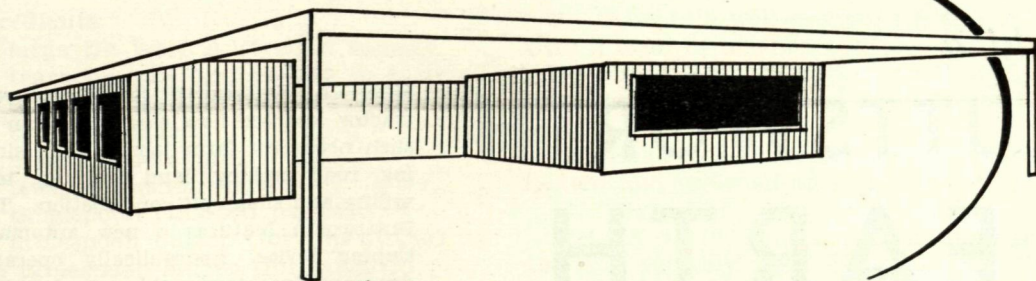
It was considered that several of the wild dogs had moved north following extensive fires on forestry land to the south early in April and it was expected that there could be further movement into the area from the same direction.

"Utility Universal"

*presents an unlimited range of buildings
with the greatest economy ever offered in
steel framed buildings*



*From a skillion shed — to a storage building
or*



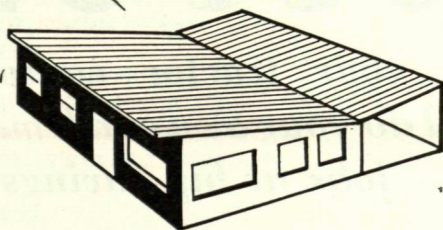
*A skillion sports pavillion
or*

*Build only with
"Utility Universal"*

Designed and made in W.A. by Utility
Buildings (W.A.) Ptd. Ltd., Norma Road,
Melville. Tel. 30 2101.

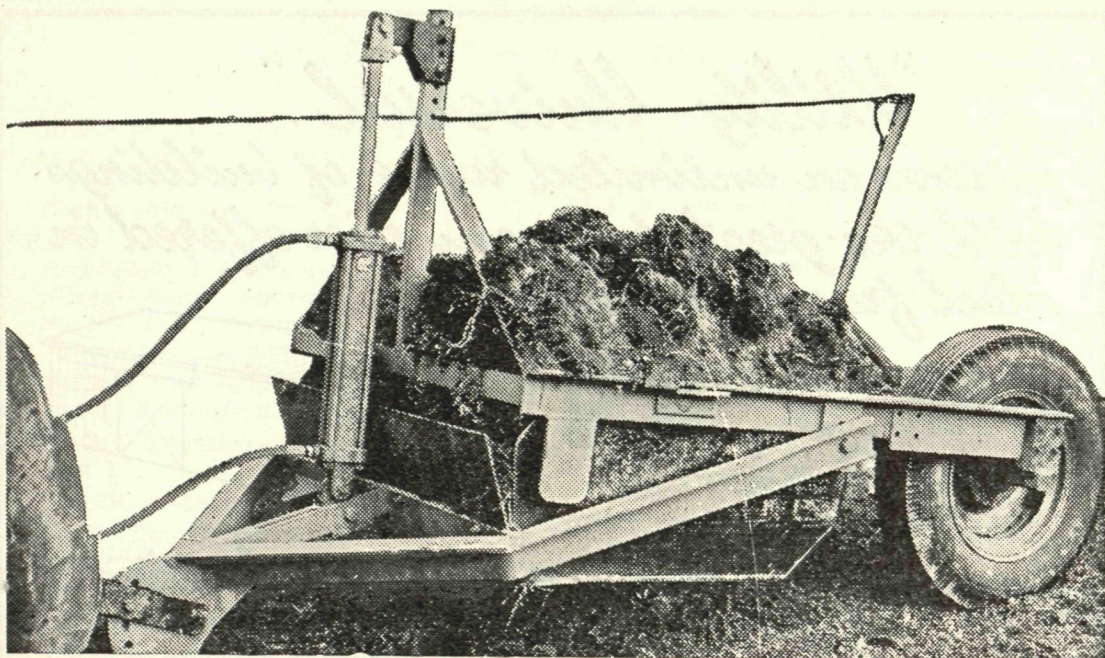


Write or phone for our represen-
tative to call and discuss your
requirements.



*Steel framed pre-cut
living quarters fully lined
and ceiled Easy to erect.*

Please mention the "Journal of Agriculture of W.A.," when writing to advertisers



Add a

BUTTSWORTH EARTH SCOOP

*To your tractor equipment
and do your own earth moving
jobs at big savings*

Full information from the W.A. Agents:

BARROW LINTON'S
763-7 WELLINGTON STREET. PERTH. BA9/51

Hitch a Buttsworth Scoop to your tractor and see how easily you can do such necessary farm jobs as dam sinking, road making, land draining, topsoiling and silage pit construction. The Buttsworth features a new automatic tipping device, hydraulically operated door and interchangeable wheels. The scoop is worked in continuous movement by the tractor driver, making stopping unnecessary. Available in all sizes from $\frac{1}{2}$ yard to 2 yard capacity.

AWARD OF MERIT

The Buttsworth Hydraulic Scoop received the Orange Field Day Award of Merit for new implements after extensive testing by the judges. It is your guarantee of efficiency and reliability. There is a hydraulic model for use with tractors with remote control hydraulic systems, and a standard model for tractors with three-point linkage or toolbar. Wheels can be changed to permit cutting right up to wall or fence.

Please mention the "Journal of Agriculture of W.A.," when writing to advertisers