

AHC 1.1 1909  
COPY 4  
APR 1 1909

Arizona Commission of Agriculture and Horticulture  
Reports.

ARIZONA  
STATE LAW AND LEGISLATIVE  
REFERENCE LIBRARY

# Arizona

## Horticultural Commission *(Authority & pest control)*

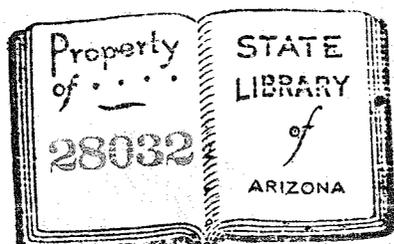
---

### FIRST ANNUAL REPORT

For the Part-year Ending June 30, 1909

---

Tucson, Arizona, August 9, 1909



Ariz  
9558.0  
A71  
1909-  
-1916/17  
copy 2

LETTER OF TRANSMITTAL

---

*To His Excellency, Richard E. Sloan , Governor of Arizona:*

SIR: In accordance with a provision of the Arizona Horticultural Commission Law, we submit herewith the First Annual Report of the Arizona Horticultural Commission, for the part-year ending June 30, 1909.

Very respectfully,

FOSTER H. ROCKWELL, Phoenix,  
Chairman

ROBERT H. FORBES, Tucson,  
Secretary-Treasurer.

ANDREW KIMBALL, Thatcher,  
Member.

## CONTENTS

---

	PAGE
General remarks - - - - -	1
The movement for a law - - - - -	2
Appointment and organization of the Commission - -	8
Beginning of operations under the law - - - - -	8
Operations for the coming year - - - - -	10
Financial - - - - -	10

# ARIZONA HORTICULTURAL COMMISSION

## FIRST ANNUAL REPORT

*For the Part-year Ending June 30, 1909*

### GENERAL REMARKS

Until recent years Arizona fruit-growers have enjoyed exceptional immunity from insect pests. After a careful survey, in 1899, Professor T. D. A. Cockerell reported that "Salt River Valley was found to be remarkably free from insect pests, and especially from injurious scale-insects" \*.

This freedom was thought by many to result from an immunity due to our exceptional climatic conditions, especially the heat and dryness of our summer months. Subsequent observations in this and similar regions, however, indicate that while certain injurious insects may for a time be inhibited by our climatic extremes, they are likely, if persistently imported, finally to establish themselves. Professor Cockerell ten years ago warned us that we were not safe in assuming that pernicious scales and other insect pests would not live when introduced under favorable conditions, and advocated quarantine measures.

For years, however, in large part due to the absorbing interest of our farmers in other affairs, especially in the development and administration of their water supply, no law was enacted. Outside nursery men learning this, in certain instances have taken advantage of the unprotected condition of our Territory to make it a dumping ground for diseased and infested nursery stock, with the result that deciduous fruit-growers in particular have suffered many thousands of dollars damage through the legislative delay.

Codling moth is now generally distributed throughout the apple orchards of the Territory; woolly aphis is widely estab-

\*Arizona Station Bulletin 32, p. 273.

lished; bryobia and pear-leaf blister mites are doing a good deal of damage; pear blight has gained entry; and a number of other bacterial and fungus diseases of crop plants have been identified.

While our citrus orchards are as yet believed to be quite free from the well known pests of other orange-growing districts, yet the danger of their introduction is great; and the greatest vigilance is advisable, especially as under the stimulus of an improved water supply, many new orchards are being started.

Particularly is it to be remembered that our former freedom from insect pests and plant diseases was due more to the newness and isolation of our irrigated valleys than to any immunity conferred by a supposedly insecticidal climate. With rapidly increasing importations of nursery stock and with already known infestations, we are therefore in need of inspection and quarantine service as vigilant and thorough as possible.

#### THE MOVEMENT FOR A LAW

Our first legislation against insect pests was enacted by the Twenty-Fourth Legislative Assembly as a clause of Par. 2, Sec II, Chapter 30, Laws of 1907, and provided only for the extermination of insect pests dangerous to the welfare of the date-growing industry. The text of this law is as follows:

“ \* \* \* \* \* the University of Arizona Agricultural Experiment Station, through its regularly appointed officers, shall have authority to inspect date palms growing within the Territory of Arizona, or any shipment of date-palm offshoots or suckers brought into the Territory from other states or countries, at any point or station designated by such officers whether such shipments are provided with a certificate of inspection or not, especially with reference to the presence on such palms or in such shipments, of insect pests dangerous to the welfare of the date growing industry; and \* \* \* in the event of the discovery upon such date palms or in such shipments, of dangerous insect pests, more particularly the scale insects, *Parlatoria blanchardi* and *Phoenicococcus marlatti*, the Experiment Station, through its aforesaid officers, is hereby empowered at its own expense, to suitably treat, or, at discretion, destroy such infested trees or shipments.”

Although the work sanctioned by this law has resulted in successfully bringing under control the date-palm scales at which it was aimed, it is yet so narrow in its application as to be of no value to horticultural interests in general.

The Twenty-Fifth Legislative Assembly again took up the subject as the result of two distinct movements, on the part of deciduous and citrus growers, respectively, for a law. In the course of this legislation all interests of horticultural nature were considered and a law finally passed which is believed to be unusually thorough and far-reaching in its provisions. This law provides for the appointment by the Governor of the Territory of the *Arizona Horticultural Commission*, consisting of three members. This commission may appoint an entomologist, establish quarantine districts and appoint quarantine inspectors; and is granted \$3,000 a year for two years with which to begin operations. The Commission is empowered (1) to inspect orchards, nurseries and nursery stock for insect pests, and to require their eradication when found; and (2) to inspect incoming shipments of nursery stock and quarantine against dangerous sources of supply.

The full text of this law (corrected for technical errors) is as follows, being Chapter 30, laws of 1909.:

#### AN ACT

#### TO CREATE AND ESTABLISH A HORTICULTURAL COMMISSION AND TO FURTHER AND PROTECT THE HORTICULTURAL INTERESTS OF THE TERRITORY OF ARIZONA

Be it Enacted by the Legislative Assembly of the Territory of Arizona:

SECTION 1. The Governor is hereby authorized to appoint within thirty days after the passage of this act a commission consisting of three members who shall be residents of the Territory of Arizona, and the owners of orchards or groves of fruit trees or vineyards within the said Territory, to be known as the Arizona Horticultural Commission, who shall hold office, one, for a term of two years, another for a term of three years, and the third for a term of four years, and until their successors, who shall hold office for a term of two years each, are appointed by the Governor and have qualified. Before entering upon the duties of the office each and every Commissioner shall take and subscribe to an oath before some person authorized to administer the same, that he will faithfully and impartially perform the duties of his office, which shall be filed in the office of the Territorial Auditor. Each Commissioner shall furnish a bond to be approved by the Territorial Treasurer in the sum of \$500.00 for the faithful performance of his duty.

Any Commissioner may be removed by the Governor for malfeasance or misfeasance in office.

SECTION 2. Within fifteen days after the notice of their appointment the persons first appointed as the "Arizona Horticultural Commission" shall qualify as hereinbefore provided, and shall meet and organize by the election of one of their number as Chairman, who shall serve as such Chairman for a period of one year and until his successor is elected. The Commission shall also at such meeting elect one of their number as Secretary and Treasurer, who shall qualify by furnishing said Commission with a good and sufficient bond in the sum of \$500 00, to be approved by the Territorial Treasurer.

Such Secretary and Treasurer shall hold office for a period of one year and until his successor is elected and qualified.

SECTION 3. The said Commission shall hold annual meetings on the first Tuesday of November, each year, at which meeting the Chairman and the Secretary and Treasurer shall be elected, and such other business shall be transacted as the horticultural interests of the Territory shall require.

SECTION 4. On the last Wednesday of March, June, September and December of each year the Horticultural Commission shall prepare and transmit to the Auditor of the Territory of Arizona a full financial statement, signed by each member of the Commission, and shall make an annual report to the Governor of the Territory on the last Wednesday in June of each year.

SECTION 5. The duties of the Arizona Horticultural Commission shall be to advance and protect the horticultural interests of the Territory of Arizona, and for that end they may employ an Entomologist, establish horticultural districts within the Territory and appoint quarantine inspectors for the same. They may quarantine against other countries, states, counties, districts or localities known to be infested with dangerous horticultural crop-pests or diseases, as hereafter provided.

They may employ clerks and other persons and incur such other expenses as may be necessary or proper to carry out the provisions of this Act, and amendments that may be made thereto. They shall determine the duties, compensation and tenure of office of the Entomologist, quarantine inspectors and other employees and may remove from office or discharge any person appointed or employed by them, at will.

SECTION 6. The Entomologist within the Territory, and the Quarantine Inspector within his district, shall have, and is hereby granted authority to, and it shall be his duty to inspect all orchards, or nurseries or trees, plants, vines, and all fruit packing houses, storerooms, salesrooms, or any other place or articles in their jurisdiction, and if found infested with scale insects, or codling moth, or other pests injurious to plants, trees, or vines, or with their eggs, or larvae, they shall notify the owner or owners or person or persons in charge or in possession of the said place, or orchards, or nurseries, or trees, or plants, or vines, or articles as afore-

said, that the same are infested with said insects or other pests, or any of them, or their eggs or larvae, and they shall require such person or persons to eradicate or destroy the said insects or other pests or their eggs or larvae within a certain time to be specified. Said notice may be served upon the person or persons, or either of them, owning or having charge or having possession of such infested place, or orchard or nursery, or trees, plants, vines, or articles as aforesaid, by the Entomologist or District Inspector, or they may be served in the same manner as a summons in a civil action. Any and all such places, or nurseries, or trees, plants, shrubs, vines, or articles thus infested are hereby adjudged and declared to be a public nuisance; and whenever such nuisance shall exist at any place within their jurisdiction, or on the property of any non-resident, or any property, the owner or owners of which can not be found by the Entomologist or District Inspector, after diligent search, within the district, or on the property of any owner or owners upon whom notice aforesaid has been served, and who shall refuse or neglect to abate the same within the time specified, it shall be the duty of the District Inspector to cause said nuisance to be at once abated by eradicating or destroying said insects or other pests or their eggs or larvae. The expense thereof shall be charged against the Territory to be paid out of the fund authorized by this Act, upon vouchers of the Horticultural Commission, as provided in Section 7 of this Act. Any and all sum or sums so paid shall be and become a lien on the property and premises from which said nuisance has been removed or abated in pursuance of this Act, and may be recovered by an action against such property and premises.

A notice of such lien shall be filed and recorded in the office of the county recorder of the county in which the said property and premises are situated, within thirty days after the right to the said lien has accrued. An action to foreclose such lien shall be commenced within ninety days after the filing and recording of said notice of lien, which action shall be brought in the proper court by the district attorney of the county in the name and for the benefit of the Territory, and when the property is sold, enough of the proceeds shall be paid into the Territorial Treasury to satisfy the lien and costs. The overplus, if there be any, shall be paid to the owner of the property, if he be known, and, if not, into the court for his use when ascertained. The District Inspector is hereby vested with power to cause any and all such nuisances to be at once abated in a summary manner.

SECTION 7. For the purpose of carrying out the provisions of this Act the sum of \$3000 00 is hereby appropriated annually. All vouchers for the expenditure of money under the provisions of this Chapter must be signed by the Chairman and one other member of the Commission and attested by the Secretary, and the Territorial Auditor upon presentation of such vouchers shall draw his warrant upon the Territorial Treasurer for the payment of the same, and the Territorial Treasurer shall pay such

warrant out of any money on hand appropriated for the purpose herein set forth. Provided, that every voucher must set forth the purpose for which the money is used.

Provided, also, that all the money remaining in the hands of the Treasurer of the said Commission on the 30th day of June of each year, shall be paid into the Treasury of the Territory to the credit of the Arizona Horticultural Commission, to be subsequently drawn out as hereinbefore provided.

SECTION 8. The members of the said Commission shall receive no compensation either directly or indirectly for their service.

SECTION 9. No Commissioner shall, either directly or indirectly, be interested in any contract made by the Commission. Any violation of the provision of this section shall be a misdemeanor.

SECTION 10. No expenditure shall be made, or indebtedness contracted in any one year in excess of the amount therein appropriated. Any indebtedness so contracted shall, on the part of the Territory, be void.

SECTION 11. When, within the judgment of the Arizona Horticultural Commission, or a majority of the members thereon, the importation from designated countries, states, counties, districts, or localities, of specified varieties of trees, shrubs, plants, vines, cuttings, grafts, scions, buds, fruitpits, or fruits, is dangerous to the horticultural interests of Arizona because of the likelihood of infestation with crop pests or diseases, the said Commission may declare quarantine against all such varieties of trees, plants, vines, cuttings, grafts, scions, buds, fruitpits, or fruits from such designated countries, states, counties, districts, or localities; and all common carriers shall be immediately notified of such declarations of quarantine, and are hereby prohibited from bringing the aforesaid varieties from the aforesaid places into the Territory.

Any person or persons, firm, corporations or common carriers who shall bring, or cause to be brought into the Territory of Arizona or any horticultural district that may be established in this Territory, any nursery stock, trees, shrubs, plants, vines, cuttings, grafts, scions, buds, or fruit-pits, shall within twenty-four hours after the arrival thereof, notify the Quarantine Inspector of the district in which such nursery stocks, or fruits, are received, on their arrival, and hold the same without unnecessarily moving the same or placing such articles where they may be harmful, for the immediate inspection of such Quarantine Inspector, and shall not deliver same until furnished with a certificate of release by the said Inspector. The Territorial Horticultural Commission, the Entomologist, or the Quarantine Inspector are hereby authorized and empowered to enter into any warehouse, depot, or upon any dock, wharf, mole, or any other place, where such nursery stock, or fruit, or other described articles are received, for the purpose of making the investigation or examination herein provided for.

SECTION 12. All nursery stock shipped into Arizona from any other state or country shall be prominently labeled with a certificate of inspection signed by a duly authorized official of the state or country in which said stock was grown. Shipments not so labeled shall be immediately sent out of the Territory, or destroyed, at the option of the owner, owners, or agent, and at his or their expense. Each carload, case, box, package, crate, bale, or bundle, of trees, shrubs, plants, vines, cuttings, grafts, scions, buds, or fruit-pits, imported or brought into this Territory, shall have plainly and legibly marked thereon in a conspicuous manner and place the name and address of the shipper, owner, or person forwarding or shipping the same, and also the name of the person, firm, or corporation to whom the same is forwarded or shipped, or his or its responsible agent, also the name of the country, state, or territory where the contents are grown.

SECTION 13. When any shipment of trees, shrubs, plants, vines, cuttings, grafts, buds, fruit-pits, or fruits imported or brought into this Territory, is found infested with any species of injurious insects, or their eggs, larvae, or pupae, such infested shipment shall be immediately sent out of the Territory, or destroyed, at the option of the owner, owners, or agent, and at his or their expense.

SECTION 14. That the Commission shall between the first and the fifteenth of January of each year cause to have printed a list of nurseries, firms, or persons, in the several states, counties, districts, or countries whose fruit trees, shrubs, plants, grafts, and all such are under quarantine. Such printed lists to be distributed and posted in public places in the several cities, towns, districts or other such places in the Territory of Arizona as the Commission may deem advisable.

SECTION 15. No persons, person or corporations shall bring, or cause to be brought into this Territory any injurious animals, known as English or Australian wild rabbit, flying fox, mongoose, or any animal or other animals detrimental to horticultural and agricultural interests.

SECTION 16. Any person, persons, or corporation violating any of the provisions of this Act is guilty of a misdemeanor.

SECTION 17. This Act shall take effect and be in force from and after its passage.

Approved, March 11th, 1909.

It will be seen that this law, though not without minor defects, is of general application, and endows the Commission with requisite powers for the execution of its provisions.

## APPOINTMENT AND ORGANIZATION OF THE COMMISSION

Following their appointment by the Governor of the Territory, the members of the Commission, March 30, 1909, met in Tucson at the University Main Building, and organized as follows:

FOSTER H. ROCKWELL, Phoenix, Chairman.

ROBERT H. FORBES, Tucson, Secretary-Treasurer.

ANDREW KIMBALL, Thatcher, Member.

The Commission then constituted the two following horticultural districts:

No. 1 To "include all that portion of country lying between the towns of San Jose and Geronimo, in Graham County, Arizona, irrigated from the Gila river and the artesian wells of Graham County; and especially including all railway, stage and other common carrier stations within said irrigated district."

No. 2 To "include all lands between Granite Reef and Arlington in Maricopa County, Arizona, irrigated from the waters of the Salt, Gila, and Agua Fria rivers, and from wells and other water supplies irrigating lands contiguous thereto; and especially including all railway, stage or other common carrier stations within said irrigated district."

Mr. Rupert E. Lee Wixom, of Thatcher, Arizona, was appointed Quarantine Inspector for District, No. 1, at the rate of \$3 50 per day for actual service, following suitable qualification for the work.

Steps were taken for the employment of an Entomologist, and with the cooperation of the Agricultural Experiment Station a plan of operations was outlined for immediate action under the law.

### BEGINNING OF OPERATIONS UNDER THE LAW

Pursuant to the plan of operations adopted by the Commission at its meeting of March 30, spraying operations for codling moth were begun in early April in the apple orchards of District No. 1. This work was begun with the assistance of Prof. J. J. Thornber of the Experiment Station, who has been effectively followed by Mr. R. E. L. Wixom, Quarantine Inspector for the district.

In the course of the season ending June 30, 1909, Mr. Wixom has inspected practically all of the orchards of his district, about 275 in number. Mr. Wixom reports the following insect pests and plant diseases as generally prevalent throughout the district:

1. *Woolly aphid*. This insect is causing serious damage in many orchards, and must be vigilantly combated, especially in late fall or early spring when it is more easily reached.

2. *Codling moth*. During the season 275 owners in the district have sprayed a total of 33,922 trees. Most of the trees were sprayed once; but some have been sprayed two and three times, and will receive yet another spraying before the close of the season. Lead arsenate has been chiefly employed.

3. *Root-rot*. This disease is quite widely prevalent, but little understood. It especially affects apple trees.

4. *Red mite*. The work of this minute creature is recognized, usually first on the lower limbs, by the rusty appearance of the foliage, which finally dries out and falls, leaving the tree in a dying condition.

5. *Crown gall*. This disease can be advantageously treated by cutting off the galls and using the bluestone-copperas-lime mixture.

6. *Pear-blight*. Occasionally found in the district, but manageable by pruning.

The experience of the season has informed the Commission of the diseases to be combated and the equipment needed for improved service in the course of next year's operations.

In District No 2, Dr. J. Eliot Coit, also of the Experiment Station, has inspected incoming shipments of nursery stock after early April, paying particular attention to the condition of the considerable quantities of citrus stock shipped this season into the country.

By reason of the lateness of the season before the passage of the law, inspection work was not begun until the bulk of the deciduous stock and perhaps a third of the citrus stock had been already received. Beginning early in April, 196 shipments were inspected, nearly all at the Phoenix railroad depots, and a record kept of their condition and destination.

*Citrus stock* constituted the bulk of the shipments received. These shipments, 147 in number, contained about 45,000 orange, pomelo and lemon trees, mostly from Florida. Almost without exception these Florida shipments were thoroughly infested with purple scale and to some extent, also, with soft scale and mealy bugs. They will have to be followed vigilantly in the field with reference to their endurance of the present summer and due precautions taken against further importations in the future. California shipments of citrus stock were in most cases clean,

but not always so, black scale being the prevailing infestation from that direction. Red spider was also found in California importations.

*Deciduous shipments* from eastern states were found considerably infested with crown gall. Eucalypts from California were uniformly clean; while of miscellaneous ornamentals, peppers and myrtle were found infested with black scale, English ivy with soft scale, roses with red spider, etc.

It is very evident from these operations that careful quarantine and vigorous inspection under very competent direction will be needed during the coming year if we are to exclude dangerous pests in future.

For the purpose of gaining all possible information bearing upon the citrus situation in Arizona, the Secretary of the Commission went to Florida during May, visiting certain districts infested by purple scale and white fly. He was much impressed by the danger from these pests to our infant citrus industry through importations of citrus stock from those districts; and advises careful vigilance in this direction.

#### OPERATIONS FOR THE COMING YEAR

With the appointment of an Entomologist by the Commission it is planned to continue and extend spraying operations against codling moth and other deciduous pests. The benefits arising from this branch of the work alone will easily defray, several times over, the cost of the Horticultural Inspection Law to the Territory.

In the citrus districts it is intended to subject existing orchards to thorough inspection in order to ascertain their true condition with reference to infestation. Upon the results of this survey will doubtless depend the nature of the quarantine measures subsequently adopted by the Commission. In view of the limited areas now planted to citrus trees, and the large development just beginning, the opportunity for effective quarantine, saving heavy expenditures to growers in future, is unusual.

#### FINANCIAL

Expenditures for the part-year, ending June 30, 1909, have been small. Pending the appointment of an Entomologist by

the Commission, the Experiment Station, whose Director is a member of the Commission, has cooperated in every way possible to make the law immediately effective. The Commission is under obligations to Professor J. J. Thornber and Dr. J. Eliot Coit for their conduct of spraying operations and inspection of nursery stock during April, May, and June. The cooperation of the Experiment Station is further assured through an arrangement whereby the Entomologist of the Commission will also be Entomologist of the Station, thus economizing the small appropriation to the extent of a portion of a salary; securing the use of scientific and office facilities at little or no cost and also securing the use of the Station frank in distributing such publications as may be printed in the form of Station bulletins.

One publication has thus far been issued by the Commission. This is Circular No. 1, April 10, 1909. Extracts from Horticultural Inspection Law.

Following is a classified statement of expenditures under claims paid, to June 30, 1909:

Per diem, inspector's services	\$15.40
Publications	11.75
Postage and stationery	10.40
Library	5.20
Traveling expenses	17.50

Total	\$60.25
-------	---------

Appropriation for period ending June 30, 1910	\$3000.00
Expenditures for period ending June 30, 1909	60.25

Balance	\$2939.75
---------	-----------

Arizona State Library and Archives



20152188 9