

# APPENDIX

## H

### AERIAL PHOTOGRAPHS OF PROJECT SITE – *ARMILLARIA* INFECTION

# SCIENTIFIC METHODS, INC.

P.O. Box 599 Durham, California 95938

Dear Dr. Beck,

I am writing this letter at the request of Mr. Bud Keeney. The property of concern is the parcel Keeney and Son calls Field 20 and 21. This parcel covers the area where the proposed Durham Villas Subdivision will be built.

My history on this property begins in 1981, when Scientific Methods, Inc. (my company) began working for Morris Keeney and his son "Bud" Keeney. Our association was infield consulting on a weekly basis during the summer months, and on a monthly basis in winter.

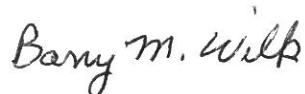
Scientific Methods, Inc. inspections would include observations of insect, disease, and nutrition circumstances found on the ranch. When problems were noted, any testing that would be required was done.

The history of this property was that heavy oak root fungus, Armillaria mellea was found both visually and in laboratory tests. Dr. Teviotdale, (U.C Plant Pathogy) was the first plant pathologist to take interest in this disease on this property because it was a highly virulent strain that was capable of killing even known resistant strains of rootstock. Other scientist aware of this problem included the farm advisor, Mr. Joe Connell and my partner Dr. Clifford Kityama. Each of these scientists identified this disease in the fields (20 and 21).

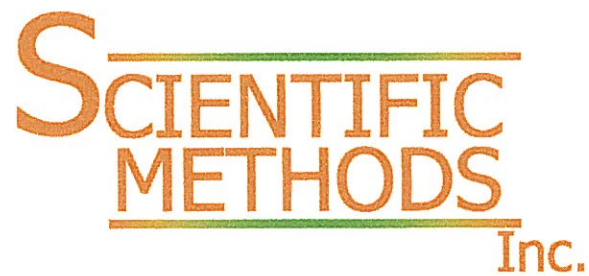
After confirmation of field presence and wide spread establishment of this disease it was recommended to replace all infected trees with resistant rootstock. This was only partially successful due to a severe infestation by a highly virulent strain. This makes it extremely difficult to keep trees alive. Old photos from 1968 and 1993 seen in Appendix 1, show the heavy tree losses to this disease. All of the spaces in these photographs represent dead or missing trees. Additional photographs can be found in Appendix 2 and Appendix 3. These additional photographs are a visual representation of these parcels over the last 30 plus years. Many science consultants have also been aware of this problem for 30 plus years. Trying to grow almonds, even on disease tolerant rootstock has placed the owner (Mr. Keeney) at a disadvantage due to reduced production and increased costs.

Dr. Beck if I can be of further assistance please let me know.

Sincerely,



Barry M. Wilk, PhD  
Scientific Methods, Inc.



# Assessment of Keeney Properties 20 and 21

July 2, 2014

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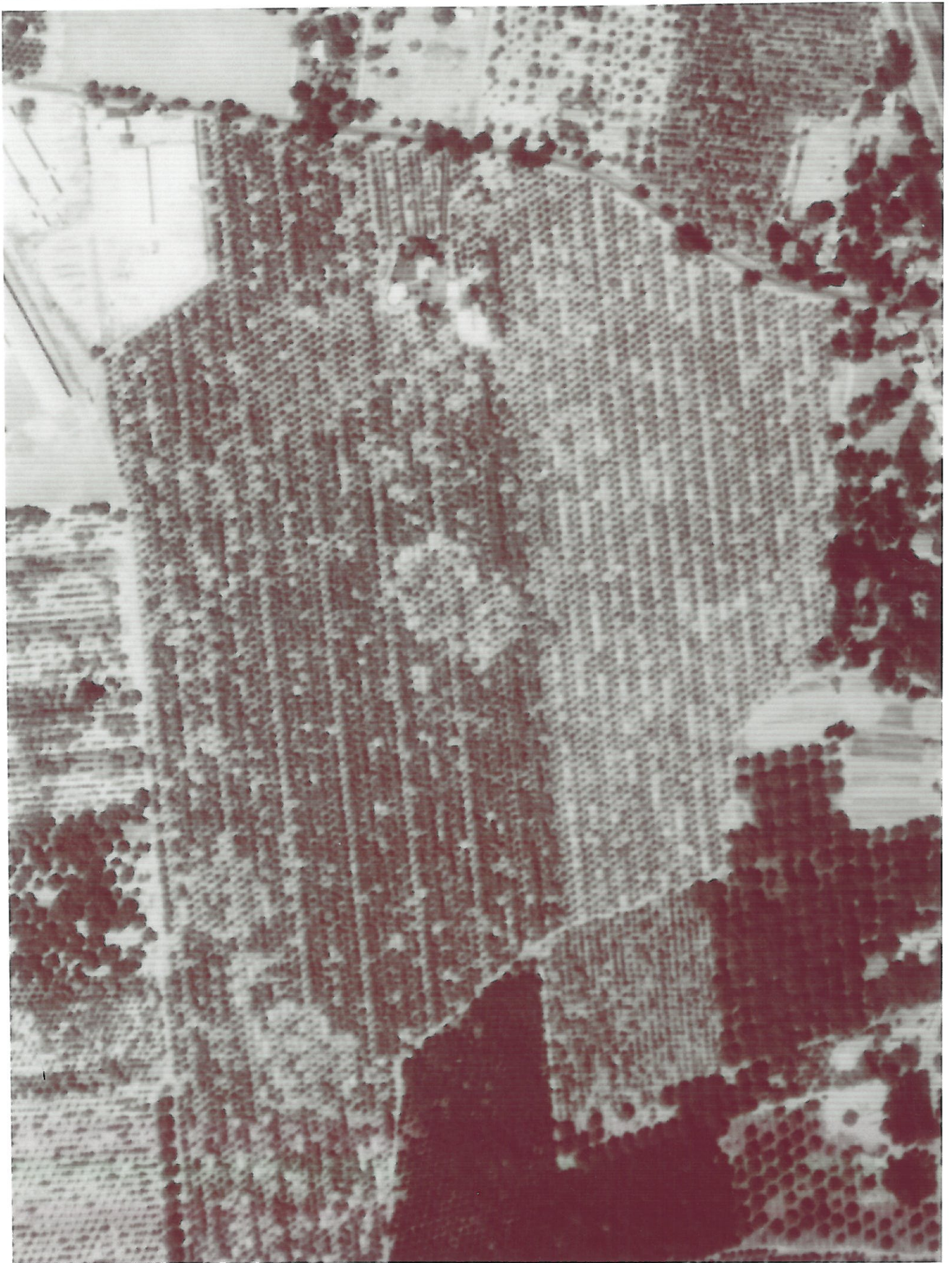
# **Appendix 1**

Keeney Properties 20 and 21 as photographed in 1968 and 1993.









# **Appendix 2**

Keeney Properties 20 and 21 at replant in 1980.







# Appendix 3

Keeney properties 20 and 21 in approximately 1986.  
(Plus or minus a year or so)

Please note, striped corner of photograph. These striped rows represents tree rows. This area of young trees was replanted due to severe loss of newly planted young trees. It can be seen in 1994 photograph that this area is still being affected.

