

July 2003

# Agrimanagement Newsletter

## Walking the Fields



There is an old expression “you are what you eat.” Some of us peering into middle age despair that we seem to be more than what we eat but that is another topic.

This topic of “feeding” has interested me as we watch the beneficial and predator insects in the organic grown, as well as conventional crops we are working on. For instance, Lady bird beetles (and there are several types) are frequent and populous in mint fields or in wheat fields at late milk stage as aphids increase. However, they are **very** scarce in potato fields-even when Green peach aphids are abundant. Now we might conclude that the well known Lady bird beetle is rather picky in the species of aphid she eats or that the flavors imparted by the crop on which the aphid feeds are expressed in the juices of the aphid (And how is potato juice?). Research entomologists I’ve talked to are not sure either.



In terms we humans can relate to, it would be the difference in grain fed vs. range fed beef or the flavor of a sage game bird, as opposed to duck. From my beekeeping experiences, we know there are very distinct flavor differences to honey depending on if it was made mainly from yellow sweet clover, buckwheat or mint.

There may be a practical application of this. In certain organic crops, where we introduce in beneficials from an insectary, we will want to choose the species type with care. For this reason we have not tried to introduce Lady bird beetles into the organic potatoes we are working with.

Another group of greatly beneficial predators are the Big eye bugs and Damsel bugs which we count in our mint and potato scouting. These fellows are busy feeding on mite eggs and the early mite nymphal stages. The Damsels even prey on caterpillars. For this reason we resist using certain insecticides that greatly diminish their population.☐

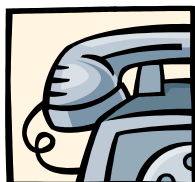
A handwritten signature in black ink, appearing to read "Don Jameson".

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For your convenience we have **direct voice mail or cell:**

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## Keep an Eye on the Calendar

By the time you read this, July will have nearly slipped away and likewise the opportunity to do what you wanted to do in July, but have not yet done. Besides a trip to the mountains, the lake or Safeco Field here are some thoughts for farming:

1. In fallow hop yards with tall stands of Kochia or Lambs quarter in the middles now flowering or in early seed, mow or beat off soon to **avoid** increasing the seed bank. 1 year of seeds provides for 6 years of weeds.
2. Other fallow hop yards with full blooming bindweed should be sprayed with the appropriate systemic now. Research has shown the bindweed root system is most susceptible to kill when the runners are blooming out to 3/4 of there length.
3. Again in fallow hop yards, or after early peas or wheat, Sudan grass, if grown for cover and N uptake conservation, should be planted **before** the end of July in the Yakima Valley. If you wish to use this as a biocide to suppress nematodes call us for the best variety to use.
4. Others of you intending to plant White Mustard or Oriental Mustard as a biocide crop to deter weeds in 2004 or as a biocide to suppress soil fungus diseases as verticilium wilt need to be drilling in the seed the first week of August to get maximum biomass for incorporation in early October. Rates are about 10 lbs/ac of seed at \$1/lb for seed. Total available N needs to be 100 lbs/ac.
5. August or September plantings of Vetch or Rye may be appropriate to fix N or conserve N from winter leaching in order to reduce the dollar outlay for N fertilizer next year. We can discuss feasible situations. ☺



## Aerial Photos

If you want us to arrange an aerial photo of a hop yard(s) for early August, or of an orchard or vineyard location let us know soon. Locations already scheduled with us will be taken as planned. This tool is useful for planning a soil sampling plan on the zone basis or for deter-

mining stronger and weaker parts of a field. If you have more questions contact Scott or Don. ☺

## Some Thoughts on Water

Recent 100<sup>0</sup> days remind us of consumptive use. A crop consuming .33 ac-inches/day, is using 9000 gallons of water/ac/day. Thus it is not surprising that some potatoes are consuming the water they are during this warm weather. A surprise to many is the fact that as an orchard or vineyard dries out, the subsoil can be drying out while the surface depths may seem adequate.

In grape management it can be desirable to deplete the moisture profile to curtail vegetative growth. **But** excessive dryness robs the vine of carbohydrate development. This has been proved by the Hill reaction of the photosynthesis process where by the H atom in CHO's comes from the water molecule (H<sub>2</sub>O). Hill's experiments also show that it is likely that the O<sub>2</sub> in the carbohydrate molecule comes from water as well and not from CO<sub>2</sub>. Therefore, it is very important to have proper water management.

With furrow (rill) irrigation still a common practice in our valley it is often difficult to know how much water is actually being applied during an irrigation cycle. This calculation of course depends on the tube size, row spacing, feet of run and row spacing. For example a 1" tube on a 1000' run for 12 hrs with a 30" spacing would result in 2.8 ac-in. of water applied. Subtracting out the volume of tail water flow gives us the net application. If you are interested in a chart of this type of information let us know. ☺

## Del Monte Asparagus Demise

We have federal foreign policy experts "to thank" for the set up of Peru as a production competitor. ☺

## Leaf Analysis Service

In April, our annual mailing or "order form" was sent to all clients using this service. If you sent that back or provided a verbal response, we will get the samples at a similar date as last year. If you forgot to send that order in you can now, or also advise us of any changes. ☺

## A Lighter Side Story (for those who own or know a mule)

A preacher on a Monday morning found a dead mule on the church yard. He called the police. With no evidence of foul play they referred him to the Health Dept. Where they referred him to the Sanitation Dept. The Sanitation Dept said only by authorization of the Mayor could they pick him up. The Preacher disliked calling the Mayor a man of bad temper and prickly personality. The Mayor started to rant and rave at the preacher and said, "why did you call me anyway? It is your job to bury the dead"!

The preacher paused for a brief prayer asking direction for his response. He was led to say "yes Mayor, it is my job to bury the dead, but I'm obliged to notify the next of kin first"! ☺

## ***Mission Statement***

*Agrimanagement is an agricultural consulting company that provides production services, independent of product sales, to farmer, orchardists and vineyards. Our main objective is to enable growers to be more efficient and achieve higher profitability. We achieve this by applying ag-science principles and techniques to address the needs and problems of the modern farmer. Our reputation is based on providing reliable, objective, timely, and affordable services adapted to individual client needs. We maintain a high level of professionalism and respect the proprietary nature of the information we collect and analyze.*



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