February 2004

Agrimanagement Newsletter

Growers: We have notes on the last L & I meeting on Cholinesterase Monitoring Regulations or catch again on the next Mtg.

Ann Byar, M.S. CIH
WISHA speaker

byar235@Lni.wa.gov
Or
call our office for notes

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1-800-735-6368
509-453-4851
voice mail 895-0100

Don Jameson	945-0549
Eric Johnson	949-5529
Bruce Hanson	949-5528
Scott Stephen	949-8843
Dave Marshall	949-0760

Walking the Fields:

Mr. Ray of Louisiana often tells a story of the grower's frustrations in this Ag production business. But first an introduction, Ray Young is a man I wish you all could meet. He has been independently consulting on cotton and other crops for over 50 years now, a man truly out at the front edge of "for fee" farm advisory work. This past year he has served as President of the National Alliance of Independent Crop Consultants. As our organization's president, he has worked on issues of interest to independent consultants but also to American farmers. He and his staff have worked on Risk Management Policy, the crop Income Protection Insurance program, product resistance management and Worker Protection Safety policy as it affects consultants and your handlers and workers.

The NAICC is a well respected and often invited contributor at the table with Washington D.C. policy makers, and regulators. This February 5 & 6th, in fact, NAICC members will be meeting with EPA representatives to give real life "field valid" explanations of what the actual times and amounts of "exposure" **really are** rather than silently allowing EPA model default values to be selected.

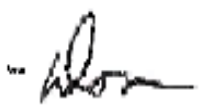
So, I've been thinking since this EPA meeting came up (and the invitation to me to attend) about a story Mr. Ray has told (I recall hearing it at least twice—but some of you tell stories twice or more as well)!

As this story goes, a farmer had spent the winter busy working with his accountant on the P & L statement and proforma budget. They had worked through the tax preparation and he had spent time with his Attorney and Crop Consultant working through the best wording of a land lease for which a hand shake no longer sufficed. He had traveled to the district L & I office to explain the situation of an unjustified employee claim. Part of the winter he worked through a strategic planning process and developed a farm employees manual and detailed safety program. Between this he attended meetings to keep his private applicators license current, and near Easter he shopped with his wife for her new clothes, and for his workers new PPE and respirators, etc.

Finally, he met with his banker and reviewed and signed all the triplicate forms. Alas, he dropped his head in silent remorse. His banker well trained in identifying at–risk behaviors gently inquired of the nature of his forlorn expression. The farmer looked up, his eyes moist and said, "you know—I've done all this so well, but now I've got to go out and plow, plant and harvest too".

Well, I just finished reading the WA Growers League sheet on transportation called Special Topics 9.5:4. It sure is easy to get turned around on what our primary purpose to our Ag production calling is these days. But at best, lets keep our common sense and prevail upon the elected and appointed to do the same. Doing such will require an allocation of time. Keep a balance and remember: 1) to give your first fruits and time to the Lord, 2) take care of your family, 3) farm well and, 4) allocate some time to public policy debate and making input. Or should I write 4 before 3??

Oh, by the way, an interest point from 9.5:2, *there are fourteen requirements for vehicle safety and most will be satisfied by use of standard passenger vehicles. . . But employees can ride in the bed of the pickup without secured seats by a MSPA exemption for travel under 10 miles on primarily private farm roads.* See ya soon in the field.



A Few Fertility Topics:

Wheat: Early P is critical and by Feekes stage 6-8 (first basal node to last leaf collar appearing) the number of kernels per spikelet is being set. During head emergence high heat can be critical and limit yields thus one reason to plant spring wheat early. The Flag leaf supplies 65% of the carbohydrates to the head kernels, hence the value to keeping the flag leaf clean of disease or P. mildew.

Phosphorus Index: Some ask us the meaning of the term Phosphorus index. It was developed by the USDA in cooperation with OSU and WSU. This term describes the method used to evaluate the likelihood that P can move off of a field and into surface waters. It considers soil slope, erodability, and irrigation system plus the inherent P fertility. It considers sources of P (fertilizer, manure, or the soil) and then the means where by it could be moved or transported into the waters. When the source calculated values are multiplied by the values of what could transport it (i.e. wind, run-off, flood, or surface irrigation) this yields an index value. Values under 14 and 27 respectively are rated as low and medium. It is not intended to be a compliance tool, but rather a planning tool available for resource management.

The attention to P management is a component of nutrient management plans required of dairies, or from farms receiving federal E.Q.I.P. money or certain types of payments.

In a practical sense it's not a problematic issue in general row crop and orchard/vineyard farming. Real concern would exist if the P concentration (bicarbonate extraction) is over 300 ppm. However in Idaho, at a concentration of or >40 ppm, any P_2O_5 applications made are not suppose to exceed crop removal quantity. However, in instances where soil P levels are lower or organic manure use applies more P than removal this is okay as long as the risk of P moving into the surface or ground water is low or medium (based on the Phosphorus index).

The Nutrient Value of Composts:

By-and-large the significant difference between fresh manure and compost is the more concentrated nature of compost, at perhaps 3-4 times more nutrients per ton (wet pile basis). By contrast fresh manure has more water and likely a higher analysis of nitrogen. The fresh manure needs quick soil disking to capture the majority of the N. I see fresh manure as a great product before crops such as corn especially silage or grain corn, and fair for sweet corn if spread reasonably uniformly. The same could be said for use ahead of alfalfa to substantially rebuild P and K concentrations. In organic production, fresh manure is the cheaper source of substantial N content. By contrast compost works well to add basic elements as P, K, Ca, Mg and traces of other nutrients plus organic carbon (a microbe energy source), but lower doses of N, as may be preferred on say grapes.

In a compost evaluation ask for a C:N ratio analysis. Those at 15:1 or less are more ripened and may release 20-40% of their N the first year. Those at 20:1 or more will release N more slowly and may give only 10% the first year.

In short, all sources applied should be analyzed first. But commonly the nutrieint load of lbs plant nutrients is 30% cheaper than if equal rates were imported from commercial fertilizier sources.

The 1000 Piece Puzzle of 2004:

Again this summer field work in the Prosser-Pasco, Horse Heavens area will be directed by Eric Johnson. We also wish to congratulate Eric upon his recent marriage to Wilhelmina Diedericks. Work in the Moxee, Mattawa, Othello and the Reservation areas will be led by Scott, Bruce and Don.

Our summer crews for both regions have not been hired yet, but we will be taking applications in March.

As has been the case the past few years, we have a cooperative alliance with John Beam, (Bean Application Technologies), to do our GPS mapping and G.I.S. data management and we look forward to another year.

Irrigation Information:

A few comments pertinent to our experience from meetings with Dr. Gary Grove: Delaying irrigation on **Cherries** can delay powdery mildew development,. Since development can follow within one week of irrigation, it is preferable to wait until after mid to latter April for the first irrigation (but this should be adjusted to your actual situation).

In irrigating **potatoes,** the size of the root system will influence water efficiency. The new vigorous Altura variety can be managed with less moisture in late

summer due to its larger, deeper root system.

Water use on **hops** peaks at near 130% of Pan evap or ETP in early July and the first week of August then drops very rapidly to near 80% by late August. In drip crops, such as hops, wine grapes and apples, soil moisture monitoring should track the vine row zone, but also periodically lateral moisture movement at 2-3' out from the emitter line.

Inches of available moisture to start the season can be estimated fairly easily on a silt loam. A silt loam with a 20-22% field capacity (FC) will hold nearly 2" of total water per foot. If we assume the allowable depletion is half then at 100% field capacity the useable water is approximately 1 inch. Then for example a soil at 75% of F.C. (available water) would have about .75" of water per foot. In coarse sands at Mattawa, which have field capacities of 9-11% the amount of available water is half of the silt loam.

2004 Irrigation Services:

Our services are designed to add value by aiding clients to best manage the timing and rates of application. In the basin, our services are GWMA qualified. We use different techniques appropriate to your situation or preference. Briefly, these are outlined below and we welcome your calls for more detail.

1. Standard Soil Sampling — weekly or every other week. Applicable to rill irrigation, wheel lines or sprinkler applied fields/blocks.
2. Moisture Point (T.D.R.) Rods — Uses time domain reflectometry and works well on permanent crops with relatively deep soils as hops, vineyards, or orchard irrigated by drip or under tree sprinklers.
3. WaterMark Sensors — with weekly visits or with a stationary in field data logger. This approach works well on asparagus, corn, pastures, spray fields, concords, and rill irrigation.
4. ECH$_2$O Sensors — with real-time in field data loggers. Can be structured with once per week e-mailed summary reports or fitted with transmission of data from the field to an in-office computer. This can be directly accessed or received via Agrimanagement with a recommendation attached.

Winter Precipitation:

Even with the greater amounts of snowfall this winter the overall precipitation levels are lower (except at Hermiston), which is likely due to less rainfall and low water content snow.

Inches of Precipitation	Nov 1st — Jan 28th 2003-04	2002-03
Harrah	3.99	5.32
Moxee	2.41	4.78
Prosser	3.60	4.18
Tri Cities	2.28	4.06
Hermiston	3.99	3.01
Othello	2.53	4.12

The amount of effect winter precipitation has on moving leachable nutrients as nitrogen, sulfur and boron depends on how much misture was received, how moist the soil was entering winter and the texture of the soil. On many of our fall reports we have included a contingency statement that takes winter precipitation into account. If you have any questions about possible changes in your nitrogen profile, please give us a call.

Political Trivia this Electon Year:

Why do the elephant and donky represent the Republican and Democratic parties?

Neither creature is particularly regal or distinguished. How did they come to be the symbols of our national parties? One person is primarily responsible. A man named Thomas Nast was the most influential political cartoonist in U.S. history. He was the nineteenth-century version of Gary Trudeau, and worked for Harpers Weekly magazine as a political cartoonist.

Another political cartoonist first used the donkey to represent the Democratic party in 1837, when a cartooon appeared depicting President Andrew Jackson riding a beast. However, Nast is credited with popularizing this political symbol. In 1870, he drew a donkey labeled "the Copperhead Press," to mock the Democratic newspapers who sympathized with the South.

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

Nast first used the elephant to represent the Republican party in a satirical cartoon. In 1874 the New York Herald reported that President Ulyssess S. Grant intended to run for an unprecedented third term in 1876, and accused him of "Caesarism," referring to the famous Roman emperor. Several weeks later, the paper erroneously reported that animals from the New York City Zoo had escaped and were roaming around Central Park. On November 7, just before midterm elections, a Nast cartoon ran in Harper's Weekly depicting a donkey disguised as a lion and marked "Caesarism." The lion was scaring all the other animals that were loose in the park, including a huge elephant labeled "the Republican Vote." Nast's depiction of the two parties using these animals was not complimentary but has stuck, and they now proudly represent their respective parties.

Incidentally, Nast is also famous for drawing the first modern-looking Santa Claus. Before Nast, Santa didn't even have a beard.

Passing of I-841:

To all of us in Agriculture that worked and contrubuted dollars to pass I-841 and bury Ergonomics—we give our congratulations. Could something similar be done to eliminate Cholinesterase blood

Memberships:

All of us belong to several commodity groups or associations. There are others we belong to and would recommend: WA Growers League, WA Independent Business Association and A.W.B. Another is the Right to Work Committee; a grass roots effort to eventually win R.T.W. status in this state, which will have a lot of long term business benefits.

Lighter Side:

You know you're getting old when you stoop to tie your shoes and wonder what else you can do while you're down there.

Growing old is mandatory; growing up is optional.

From Iowa: A bachelor corn grower checked out a library book titled *How to Hug*.. At home he discovered it was the 7th volume of the encyclopedia.

Good Old Days:

Sometimes we harken to the "Good Old Days". One orchardist told me, *"Who knows 20 years out from today MAY be the Good Old Days"*! Maybe this gets at the message of Ecclesiastes 7:10 *Do not say, "Why were the old days better than these?" For it is not wise to ask such questions.*

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Agrimanagement

408 North First Street
P.O. Box 583
Yakima, WA 98907-0583

Phone: 509-453-4851
Toll Free: 800-735-6368
Fax: 509-452-6760
Website: www.agrimgt.com
Email: info@agrimgt.com