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UPDATE ON THE CONFINED ANIMAL FEEDING REGULATIONS

The Colorado Department of Public Health & Environment and the Water Quality Control Commission is evaluating our current Confined Animal Feeding Operation (CAFO) regulations to determine if they need to be revised. The influx of swine facilities in eastern Colorado and increased suburban development has prompted a call for more controls to insure that water quality is not compromised by animal wastes or excessive nutrients. There are, of course, other issues around animal production related to air quality, odor, zoning, property values, etc., but water quality concerns are viewed as one way to restrict this industry.

A bill was introduced in the last Colorado legislative session to require these facilities be bonded against environmental damage, but it failed. On the national level, Senator Harkin of Iowa has just introduced "The Animal Agriculture Reform Act" to require mandatory nutrient management planning for CAFOs. In Colorado, we currently have a CAFO regulation that is "self-implementing" and enforced on a complaint driven basis. No permits are issued and no compliance monitoring is conducted by the health department.



Furthermore, the state Health Department has no record of how many confined feeding operations exist or where they are located.

In response to public concerns, the Water Quality Control Commission authorized a work group to study the current regulation and to propose how it should be modified.

(Continued on page 4)

PERENNIAL AND NOXIOUS WEED

Plants classified as noxious weeds can be annuals, biennials, or perennials. Under the Colorado or the Federal Noxious Weed Act, a weed is classified noxious if it is non-native, potentially harmful, but not yet widely prevalent. Weeds are always a challenge to manage or control, regardless of their life cycle. Generally, the most difficult to control are creeping perennial weeds because we must eliminate the vegetative structures (i.e., stolons, rhizomes or horizontal roots) that are responsible for the lateral spread and are the primary means of reproduction.

Creeping perennials can spread and become established from seed. However once a creeping perennial becomes established from a seed in a given location, the major method for spread of that particular colony is from stolons, rhizomes or horizontal roots. Noxious creeping perennials found in the Tri River Area include Russian knapweed, Canada thistle, whitetop (hoary cress), leafy spurge, yellow toadflax, and purple loosestrife.

To insure a successful weed management program, two or more of the five basic weed control methods (preventative, cultural, mechanical, biological, and chemical) need to be utilized. Sound cultural practices are absolutely essential for sustained weed control. Regardless of any other control methods and their success, if desirable plants are not established and correctly managed, weeds will re-infest

the area and the weed management program will be a failure.



Herbicides are another important tool for controlling and managing creeping, perennial weeds. A successful chemical control program for perennial weeds requires three very important steps: product choice, rate of application and application at the correct growth stages.

In the Tri River Area, incorrect timing of the herbicide application is the most frequent mistake, followed by rate of application and finally choice of herbicide. Timing can vary depending on the herbicide used as well as the species being controlled. However the general "rule of thumb" is to treat annual weeds when small and actively growing, biennial weeds when in the rosette stage of development, simple perennials in the rosette stage or in the fall, and creeping perennial weeds at bud to early flower stages or in the fall prior to the first "hard freeze".

The following documents have information on related topics. For copies, contact The Other Bookstore (Cooperative Extension Resource Center) at CERC@vines.colostate.edu OR Fax (970) 491-2961 OR Phone(970) 491-2961 or write to them at: CERC, 115 General Services Bldg., Colorado State University, Fort Collins, CO 80523-4061.

Fact Sheets

Canada Thistle (3.108)
Herbicide formulations (0.558)
Herbicide surfactants and adjuvants (0.559)
Weeds and conservation tillage (3.113)
Weed management on small rural acreages (3.106)

Bulletins

Best Management Practices: Pesticide and Fertilizer Storage and Handling (XCM-178)

Best management Practices: Pesticide Use (XCM177)

1996 Colorado Pesticide Guide Field Crops (XCM43)

CONTROL - TIMING IS EVERYTHING

In biological systems, "rule of thumb" applications do not work in every situation. For example, Curtail® (clophralid + 2,4-D) provides better control of Canada thistle when applied to actively growing plants just prior to bud development than when applied to the bud or flower stages. Research test results from work in the late 80's in the Pacific Northwest showed Curtail applied to Canada thistle pre-bud resulted in 85 to 90 percent population reduction one year later. Curtail applied to Canada thistle at bud to flower stage only resulted in 70 to 75 percent population reduction one year after application. Curtail provides very good control of Canada thistle when applied in the fall.

I initiated 10 demonstration tests using Curtail beginning in September of 1995 for control of Russian knapweed in the Tri River area.

Some locations involved fall applications only and others involved both summer (early bud to early flower) and fall applications. The fall applications of Curtail have provided the best and most consistent control of Russian knapweed to date.

A single application of 3 qts/A of Curtail applied in September 1995 resulted in 95 to 99 percent reduction of plant populations one year later (September 1996) and 90 to 95 percent control into the second season (July 1997). Untreated control plots had an average of 8 Russian knapweed plants per square foot. No other plants were present with the Russian knapweed except whitetop (hoary cress). In the spring and summer of 1996, we were able to establish pasture grasses in the Curtail treated areas where irrigation water was available.

To date, I have documented over 500 acres of Russian knapweed that were treated with Curtail as a result of the demonstration plots. The results have been consistent with both ground and aerial applications at the 3 qt/A rate. A report on all Russian knapweed test location results to date for the Tri River Area will be available for distribution in December 1997.

REMEMBER, the application of herbicides in a safe and effective manner requires the user to READ THE LABEL before applying the product and not after something goes wrong.

☛ Wayne Cooley, Agronomy Extension Agent



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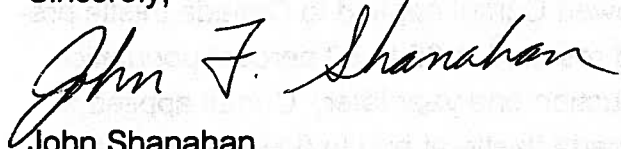
Extension Specialist - Water Quality

UPDATE ON THE CONFINED ANIMAL FEEDING REGULATIONS (continued from page 1)

Testimony from concerned citizens and members of the work group was heard by the commission on Nov 3. The staff of the health department proposed that a permit-based enforcement system and adequate funding is needed to properly regulate animal waste management. The commission accepted this suggestion as reasonable, however, there is no statutory authority to permit agricultural operations in Colorado at this time. The commission voted to hold a formal rule-making hearing on the CAFO regulations next December, 1998. In the meantime, an attempt will be made to achieve sponsorship for a bill to grant permitting authority to the health department for animal operations.

Anyone interested in more information on the proposed Colorado regulation or the Harkin... may contact me for a copy of these proposals.
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Sincerely,



John Shanahan
Extension Specialist

COOPERATIVE EXTENSION SERVICE
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PENALTY FOR PRIVATE USE, \$300

1997 PINTO BEAN VARIETY PERFORMANCE IN EASTERN COLORADO

To provide reliable and unbiased performance information to Colorado dry bean producers for making better variety decisions, CSU annually evaluates dry bean variety performance at three locations in northeastern Colorado. This research is made possible by the cooperation of three eastern Colorado bean producers who donate their land, machinery, and time and by funding provided by the Colorado Dry Bean Administrative Committee. In 1997, pinto bean variety trials were conducted in northeastern Colorado at Holyoke, Ovid, and Atwood (Sterling). Twenty varieties were entered in the trial, including 12 private varieties and 8 public varieties or experimental lines. All entries were planted in all three locations to improve the reliability of variety decisions based on trial results. Grain yields, in pounds per acre, were adjusted to 14% moisture content.

Variety	Trial Locations			Averages*	
	Atwood	Holyoke	Ovid	Yield	Seeds
	Yield lb/ac	Yield lb/ac	Yield lb/ac	Yield lb/ac	Seeds #/lb
CO51715	2941	2719	-----	2830	1236
CO51713	2839	2695	1907	2480	1256
Chase	3024	2506	1721	2417	1277
ROG 179	2618	2566	2005	2396	1202
Elizabeth	2534	2199	-----	2367	1187
96YT117	2825	2643	1504	2324	1277
96YT115	2765	2407	1792	2322	1217
96YT116	2794	2629	1503	2309	1275
Othello	2482	2609	1383	2158	1306
ROG 117	2608	2241	1562	2137	1314
ROG 261	2786	2198	1363	2116	1293
Burke	2781	2298	1262	2113	1288
Apache	2779	2157	1384	2107	1222
Bill Z	2533	2332	1439	2101	1322
Buckskin	2577	2277	1171	2008	1270
93:220	2882	1790	1310	1994	1215
Maverick	2401	2047	1284	1911	1285
ROG 299	2199	1884	1342	1808	1240
Vision	1778	1843	1250	1624	1334
GTS-900	2108	1755	966	1610	1322
Average	2613	2290	1453	2141	1269
CV%	10.4	13.5	15.2		
LSD(.3)	200	229	163		

*Averages based on Atwood and Holyoke trials only.

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