## Certified Weed Free Hay and Straw Program

## Kenny E. Perry Graves Co. ANR Extension Agent

There is a growing demand in North America for the use of certified weed free hay and straw as a preventative program to limit the spread of noxious weeds. This voluntary certification program is designed to assure that hay and straw sold with proper certification identification meets minimum standards designed to limit the spread of noxious and undesirable weeds. Buyers are provided assurance that hay and straw certified through this program meets these minimum standards.

Kentucky Seed Improvement Association (KSIA) has been in the seed certification business since its inception in 1939. This longstanding tradition of providing quality control services to the seed industry will be helpful as they implement a Weed Free Hay and Straw Program. KSIA was designated as the official provider of this program for the state by the Kentucky Department of Agriculture in 2007.

Kentucky's certification standards comply with the Weed Free Forage Certification Standards developed by the North American Weed Management Association (NAWMA). NAWMA has established minimum standards to allow uniform participation by states and provinces in the program. Hay and straw certified under KSIA certification with proper certification markings attached will be eligible to be shipped into restricted areas in the United States and Canada where only hay and straw certified under the NAWMA Standards can be used.

This program is designed:

- to limit the spread of noxious weeds through hay and straw.
- to provide assurance to producers and buyers that hay and straw certified through this program meets specific standards.
- to provide uniformity between different states and provinces involved with this program.

The name of the program is somewhat of a misnomer as the certified product will not be completely free of all weeds, but there will be no seeds, tubers, rhizomes, etc... whereby the spread of noxious or undesirable weeds may occur.

The field and storage site inspections are at the core of this program and will be administered by experienced KSIA inspectors located throughout the state. However, the production and distribution of certified products also depends on the integrity of those participating in the program.

In other Midwestern states this program has been used as an additional marketing opportunity for hay and straw producers. Potential markets include customers

seeking clean hay, people needing certified hay for their horses on visits to national parks and contractors using straw for road construction erosion-control projects.

The following steps are key to producing Weed Free Hay and Straw:

- 1) Producers will submit an application to Kentucky Seed Improvement Association. Field inspection applications for straw should be received no later than May 15<sup>th</sup>, while hay field inspection applications should be received 4 weeks prior to cutting.
- 2) KSIA will forward an inspection report to one of its inspectors who will contact the producer to locate the field(s), storage site(s) and get an approximate cut date.
- 3) Within 10 days of harvest, the inspector will go to the field(s) and storage site to determine the presence or absence of noxious and/or undesirable weeds. Fields harvested prior to inspection are not eligible for certification. All fields and storage sites should be free of those noxious weeds and undesirable plant species listed in appendix A. The field and storage sites include the surrounding ditches, fence rows, roads, easements, grass waterways, or a buffer zone surrounding the field.
- 4) Fields or storage sites that contain noxious weeds or undesirable plant species (as identified in Appendix A) may be certified if the following requirements are met:
  - a. The noxious weeds and undesirable plant species in the field in which the hay or straw is being produced were treated to prevent seed formation or seed ripening to the degree that there is no danger of dissemination of the seed or the propagating parts of the plant capable of producing a new plant.
  - b. The noxious weeds and undesirable plant species were treated in the vegetative growth stage prior to the rosette to bud stage (or boot stage for grass species classified as weeds) prior to cutting or harvesting.
  - c. The treatment method can include but is not limited to:
    - i. Burning
    - ii. Mowing or Cutting
    - iii. Rouging
    - iv. Herbicides
  - d. If noxious weeds have not been treated and are present in areas adjacent to the field, an isolation/buffer strip should be established between the crop to be harvested and the area infested with noxious weeds. This strip must be no less than 10 feet wide, and can be established by mowing or cultivation.

- 5) Producers may identify their product using colored twine, tags or a transit certificate for shipping.
- An inspection certificate shall be issued by KSIA indicating that the above requirements have been met based upon field inspection.
- 7) The applicant must keep accurate records of the amount of hay or straw harvested from each field including where the hay or straw is stored after harvest. The following records must be maintained:
  - 1. The number and average weight of bales harvested.
  - 2. The exact location of the inspected site where bales are stored.
  - 3. Date of harvest.
  - 4. Field number(s) and location(s) of the field(s) where the product was produced.
  - 5. Copies of all certification documents.
  - 6. Current inventory records.

Records must be made available upon request by KSIA.

## APPENDIX A

The following weeds have been designated as noxious or undesirable in the NAWMA Weed Free Forage Certification Standards (Kentucky weeds have been added to the listing):

- 1. Absinth wormwood (*Artemisia absinthium*)
- 2. Bermudagrass (*Cynodon dactylon*)
- 3. Buffalobur (*Solanum rostratum*)
- 4. Canada thistle (*Cirsium arvense*)
- 5. Common burdock (Arctium minus)
- 6. Common crupina (*Crupina vulgaris*)
- 7. Common tansy (*Tanacetum vulgare*)
- 8. Dalmatian toadflax (*Linaria dalmatica*)
- 9. Diffuse knapweed (Centaurea diffusa)
- 10. Dyers woad (*Isatis tinctoria*)
- 11. Field bindweed (Convolvulus arvensis)
- 12. Hemp (marijuana) (*Cannabis sativa*)
- 13. Henbane, Black (*Hyoscyamus niger*)
- 14. Hoary cress (Cardaria spp.)
- 15. Horsenettle (Solanum carolinense)
- 16. Houndstongue (*Cynoglossum officinale*)
- 17. Johnsongrass (Sorghum halepense)
- 18. Jointed goatgrass (Aegilops cylindrica)
- 19. Leafy spurge (Euphorbia esula)

- 20. Matgrass (Nardus stricta)
- 21. Meadow hawkweed complex (*Hieracium caespitosum [H. pratense], H. floribundum, H. piloselloides*)
- 22. Meadow knapweed (*Centaurea pratensis*)
- 23. Medusahead (*Taeniatherum caput-medusae*)
- 24. Milium (*Milium vernale*)
- 25. Musk thistle (*Carduus nutans*)
- 26. Orange hawkweed (*Hieracium aurantiacum*)
- 27. Oxeye daisy (*Chrysanthemum leucanthemum*)
- 28. Perennial pepperweed (*Lepidium latifolium*)
- 29. Perennial sorghum (Sorghum almum)
- 30. Perennial sowthistle (Sonchus arvensis)
- 31. Plumeless thistle (*Carduus acanthoides*)
- 32. Poison hemlock (*Conium maculatum*)
- 33. Puncturevine (*Tribulus terrestris*)
- 34. Purple loosestrife (*Lythrum salicaria*)
- 35. Quackgrass (Agropyron repens)
- 36. Rush skeletonweed (Chondrilla juncea)
- 37. Russian knapweed (*Centaurea repens*)
- 38. Scentless chamomile (*Matricaria perforata* or *M. milaceum*)
- 39. Scotch broom (*Cytisus scoparius*)
- 40. Scotch thistle (*Onopordum acanthium*)
- 41. Sericea Lespedeza (*Lespedeza cuneata*)
- 42. Silverleaf nightshade (Solanum elaeagnifolium)
- 43. Skeletonleaf bursage (*Ambrosia tomentosa*)
- 44. Spotted knapweed (*Centaurea maculosa*)
- 45. Squarrose knapweed (*Centaurea virgata*)
- 46. St. Johnswort (*Hypericum perforatum*)
- 47. Sulfur cinquefoil (*Potentilia recta*)
- 48. Syrian beancaper (*Zygophyllum fabago*)
- 49. Tansy ragwort (Senecio jacobaea)
- 50. Toothed spurge (*Euphorbia dentata*)
- 51. Wild oats (Avena fatua)
- 52. Wild proso millet (*Panicum miliaceum*)
- 53. Yellow hawkweed (*Hieracium pratense*)
- 54. Yellow starthistle (*Centaurea solstitialis*)
- 55. Yellow toadflax (*Linaria vulgaris*)

## Additional weeds designated as Restricted or undesirable in Kentucky:

- 56. Annual Bromus spp.
- 57. Black Nightshade (*Solanum ptycanthum*)
- 58. Bull Thistle (*Cirsium vulgare*)
- 59. Cocklebur & Spiny Cocklebur (Xanthium strumarium & spinosus)
- 60. Corncockle (Agrostemma githago)
- 61. Dodder (*Cuscuta spp.*)

- 62. Giant Foxtail (Setaria faberi)
- 63. Hemp Dogbane (*Apocynum cannabinum*)
- 64. Ryegrass, Annual and Perennial (Lolium multiflorum and perenne)
- 65. Spiny Amaranth (*Amaranthus spinosus*)
- 66. Wild Garlic (Allium vineale)

For more information, contact Kentucky Seed Improvement Association at (859)281-1029 or by email kyseed@prodigy.net.