Where do we go from here?

John Byrd
Mississippi State University
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Those who do not remember the past are forced to repeat it.

George Santayana
THE MIRACLE VINE

Visitors inspect a field of kudzu on the Yellow River Farm
Where we are headed

2005 Energy Policy Act

• Renewable Fuel Standard: By 2022, the US should produce
  • 5 billion gallons ethanol (from corn)
  • 4 billion gallons non-corn ethanol
  • 1 billion gallons biomass biodiesel
  • 16 billion gallons cellulosic biofuel from non-edible sources
Where are we headed?
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- University of Illinois
- Mississippi State University
- University of Georgia
- Michigan State University
- University of Wisconsin
- University of Missouri
- USDA
- Department of Defense
Where are we headed?
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Vertically integrated agriculture ventures have no alternative market.

When the contracted buyer cuts off the grower, the grower has no revenue.

What alternative uses exist for non-edible cellulose sources?
Mr. Raiford, I listened with great interest to your commentary on kudzu on Thursday, September 8. In fact, I would greatly appreciate an electronic copy of the editorial as I collect material on kudzu.

As a weed control specialist with the Mississippi State University Extension Specialist that has done quite a bit of research on kudzu control, I agree that kudzu is a weed. I also agree that kudzu does not stop erosion as was thought in the 1940's.

However, your editorial was not completely accurate that kudzu has no uses. The Japanese use starch extracted from the roots in many of their baked goods. Kudzu roots are not a practical source of starch in the US because we have other cheaper sources and the negative effects of soil erosion to our rivers and creeks if the roots were dug outweigh the value of the starch.

Kudzu, however, is an excellent forage for livestock. Yes, goats consume it, but cattle, pigs and even chickens can be raised on this highly nutritious legume. In fact, kudzu was highly promoted and planted for livestock forage in the southeastern US because prior to the mechanization of transportation and farming and the industrialization of the US, there was a need for a highly nutritious forage crop to feed draft animals and livestock. Kudzu could be grown in the southern US where perennial forages like alfalfa failed due to insect and disease pests, and did not have to be planted from seed each year like peas or soybean, so production costs were minimal once stands were established. The negative aspect of kudzu as a forage crop is the difficulty of harvest. Since this vine produces roots at each point its nodes touch soil, it is difficult to harvest for hay. The forage and livestock scientific community has known for many years that kudzu will not tolerate overgrazing. The practicality of confining livestock in areas infested with this vine in many parts of the southeast is impractical and the negative effects of livestock manure going directly into surface water or livestock stirring sediment in creeks is a concern too.

Kudzu has one additional value: it is a living memorial. Just as The Wall stands in Washington, DC, as a reminder of those that fought for freedom, kudzu should be a constant reminder that "advances" with plants must be made with caution. We CANNOT predict what or where plants or other organism introduced from other countries will be 100 years from today. Most importantly, we should examine all potential "new" crops, especially those evaluated as biofuels, such as Miscanthus, while looking at a picture of kudzu. We should be asking how will we eradicate Miscanthus if the "need" for biofuel disappears? How will Miscanthus be eradicated if the landowner sells that property or dies? Can Miscanthus be eradicated when the biofuel producer wants to pay $0.01 per pound of biomass rather than the initial $0.20 per pound that was paid last year?

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Where are we headed?

- Don’t sit by and watch it happen
- Write those that make decisions
- Ask the tough questions
Where are we headed?

- Or, pay the consequences: Let our grandchildren or great grandchildren watch Miscanthus choke out cogongrass