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Marketing Opportunities for Perennial Peanut Hay, 2002¹

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The following is the executive summary of a much larger report, which is only available in pdf format. To access the complete report, please click here.

Executive Summary

Perennial peanut is a warm season legume that produces few nuts but has foliage and stems that make very high quality hay. It was first introduced into Florida in 1936, but only after the release of several improved varieties in the late 1970s and early 1980s were farmers able to successfully commercialize production. University of Florida agronomists estimate that by the end of the 2001 planting season, perennial peanut production in Florida had expanded to about 23,000 acres. Perennial peanut hay is very similar to alfalfa in nutritional characteristics, and palatability studies have shown that most livestock prefer it over alfalfa.

Florida is one of the nation's leading states in the horse industry, which is one of the most lucrative markets for high-quality legume hay. A 1988 University of Florida study found that only about 10 percent of horse owners in north-central Florida had firsthand experience with perennial peanut hay.

Because of the continued growth of perennial peanut hay production and the continuing demand for high-quality hay by the Florida horse industry, an updated assessment of the perennial peanut hay market among Florida horse owners was conducted.

The overall objective of this study was to determine the awareness and use of perennial peanut hay among horse owners in Florida. Specific objectives were to determine the types of hay preferred by horse owners, relative quantities purchased, seasonality of demand, and prevailing prices. Other important objectives were to identify barriers to increased consumption of perennial peanut hay and to determine the sources of information used by horse owners in deciding what types of hay to buy.

A questionnaire was mailed to all 3,400 Florida members of USA Equestrian in the fall of 2002. It solicited detailed information on types and quantities of hay fed by season, prices paid, numbers of horses owned, respondents' roles in decision-making with respect to hay purchases, sources of information about hay, and activities in the horse industry for the year 2001. Respondents were also asked for basic demographic information such as age, income, and education.

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A total of 549 usable questionnaires were received, for an overall response rate of 17 percent. About 86 percent of the respondents were female, over 62 percent had college degrees, and over 60 percent had household incomes of \$70,000 or more. The average age was 45 years old, and on average they had 23 years' experience in the horse industry. Approximately 90 percent of all respondents were directly involved with formulating rations for their horses or making decisions about hay purchases.

The majority of the respondents (60 percent) buy some or all of their hay from retail feed stores. Much smaller percentages buy their hay from hay brokers. About 23 percent buy directly from hay growers located within a 50-mile radius of their horse farms, and about 11 percent buy from hav producers located more than 50 miles away. Respondents were asked about their satisfaction with the availability of hay from their major suppliers. Only 13 percent were "very satisfied", but 31 percent were "very dissatisfied". It appears that there are ample opportunities to improve the level of satisfaction of horse owners by adequately addressing availability issues. More emphasis on developing contractual agreements for future hay delivery could address issues of availability.

Respondents mentioned a number of sources of information as to where to buy hay. Aside from their own personal experience, their network of friends was a prime source. Other sources of information included hay suppliers (64 percent) and veterinarians (42 percent). Sales representatives of feed retailers, Cooperative Extension agents, horse shows, exhibitions, seminars, and horse industry publications were all mentioned by smaller numbers of respondents.

In deciding what types of hay to buy, respondents mentioned many of the same sources of information as above. However, veterinarians were cited by nearly two-thirds of all respondents. Thus, a veterinarian who is adequately informed as to the attributes of perennial peanut hay can be an important and influential conduit of positive information to horse owners.

Legume hays constituted about 28 percent of the total hay purchases reported by respondents for 2001. Alfalfa, perennial hay, and clover represented about 19 percent, 6 percent, and 3 percent, respectively, of total hay purchases. Because perennial peanut hay currently comprises about 20 percent of the legume hay market, an aggressive education and promotional program, coupled with assurances of adequate supplies, could increase perennial peanut hay's market share.

Weighted average prices paid by respondents for alfalfa hay were nearly \$9.25 per bale in 2001, compared with about \$7.00 per bale for perennial peanut hay. However, it appears that the price premium enjoyed by alfalfa has been declining relative to perennial peanut hay. If prices reported in a 1988 University of Florida study are adjusted for inflation and compared with the prices reported by respondents for 2001, real (constant) alfalfa prices have declined by about 10 percent, while real perennial peanut hay prices have increased by over 90 percent.

Respondents who had fed both alfalfa and perennial peanut hay were asked to evaluate nine critical product attributes for each hay type using a rating scale where 0 represented "very dissatisfied" and 10 represented "very satisfied". Attributes evaluated were smell, color, palatability, ease of handling, free of weeds, nutritional value, free of mold/rot, free of insects, and price. Respondents rated alfalfa hay higher on every attribute, with the exception of price. All these rating differences were statistically significant at the 0.01 probability level. Price was the only attribute where perennial peanut hay received a superior rating.

A significant minority of respondents gave perennial peanut hay very low ratings for most attributes. These respondents may have purchased poor quality perennial peanut hay, or may have fed field peanut hay (grown for nuts). In any case, the pervasive perception that perennial peanut hay is inferior poses a significant educational and public relations challenge. On a positive note, ratings by the 40-plus respondents who fed perennial peanut during 2001 were superior to all other types of hays, including alfalfa, over nearly all seasons of the year.

Of the 492 respondents responsible for hay selection and purchases, 255 said they had fed perennial peanut hay. However, only 20 percent said they would feed it in the future. The major reason cited was lack of availability, mentioned by nearly 53 percent. Other reasons included "no longer feed legume hay", appearance, and cost. A few said their horses did not like it, and small numbers said it offered poor nutritional value.

Fortunately, most of the reasons given for not wanting to feed perennial peanut hay in the future can be overcome with greater perennial peanut hay production and assurance of adequate supplies, perhaps through forward contracting. Quality control measures and market development programs that can serve to educate hay users on the nutritional and palatability merits of perennial peanut hay can also pay dividends.

There is also a pressing need for dissemination of factual information about perennial peanut hay to the horse industry. An investment in a proactive educational and promotional program aimed directly at horse owners and indirectly at individuals such as veterinarians and Cooperative Extension agents is recommended. Nearly 93 percent of the respondents have Internet access, which suggests that a professionally developed Internet website would be a valuable product information dissemination tool.

The Perennial Peanut Producers Association is in a unique position to develop and implement measures to improve and promote the integrity of the perennial peanut hay industry, and to inform hay buyers about the true merits of perennial peanut hay when quality control measures are in place. The development and adoption of a widely recognized trade name, along with a system of grades and standards, will accelerate the realization of this product's true market potential.

References

Degner, Robert L., Kimberly L. Morgan, Thomas J. Stevens III, and Clay Olson. 2003. *Marketing opportunities for perennial peanut hay*. Florida Agricultural Market Research Center Industry Report 03-1, Department of Food and Resource Economics, University of Florida, Gainesville, FL (May). http://agmarketing.ifas.ufl.edu.

Degner, Robert L., and J. David Locascio. 1988. *Acceptance of perennial peanut hay by Florida horsemen*. Florida Agricultural Market Research Center Industry Report 88-15, Department of Food and Resource Economics, University of Florida, Gainesville, FL (November).