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INTRODUCTION

The USDA requires that 30% or more of the cow dry matter intake be from pasture during the grazing season. When well managed, pasture can be a low cost, high quality feed for dairy cows. However, in order to maintain milk production and profit, supplementary feed are often added to the ration. Under these circumstances, ration balancing can become challenging. Furthermore, organic producers, may face additional challenges in procurement of supplemental feed.

OBJECTIVES

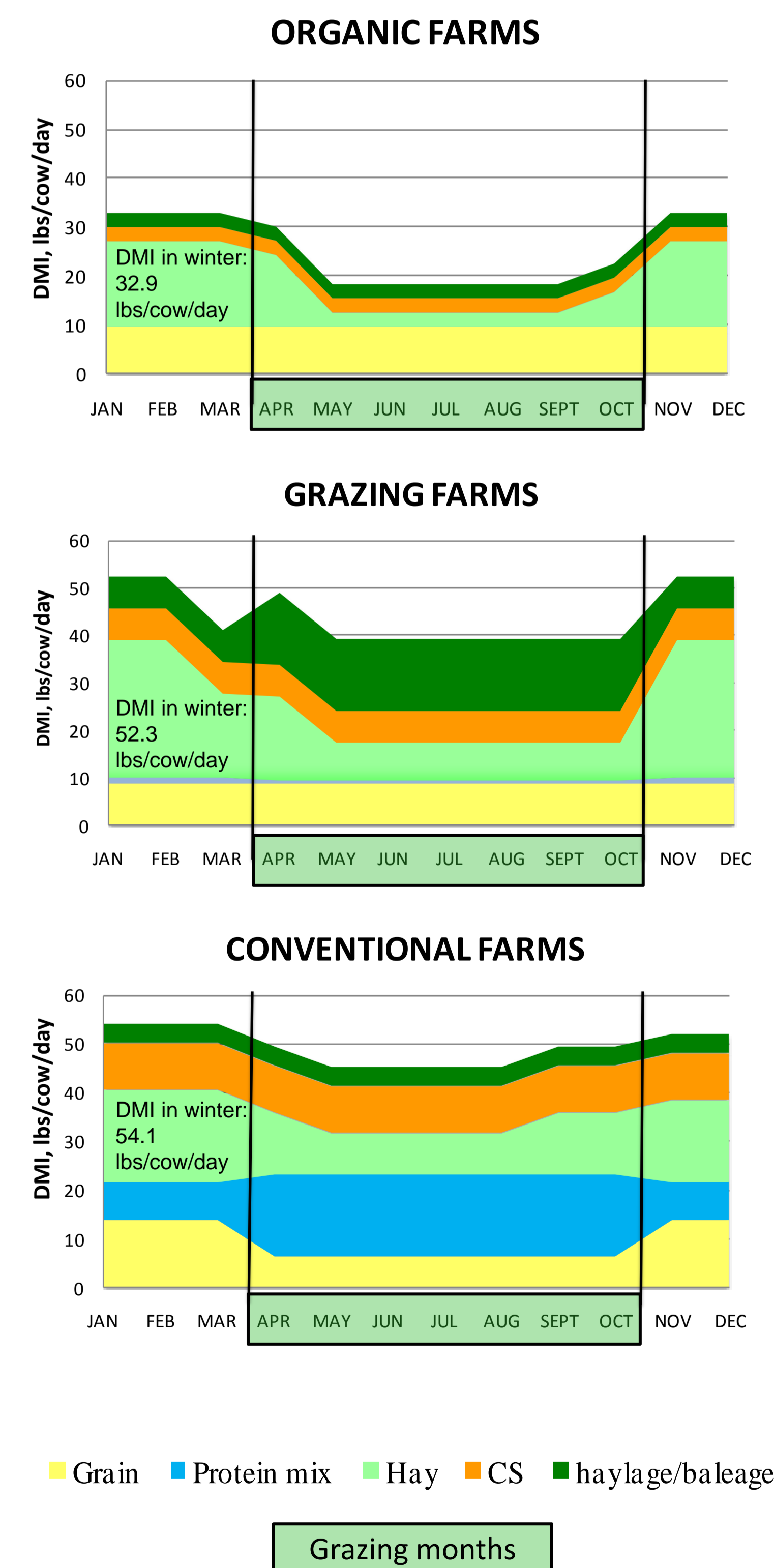
The first aim of this study was to describe feeding practices used on distinct Wisconsin dairy farm systems throughout the year and especially during the grazing season. The second aim was to study the impact of those feeding practices on milk production and milk income over feed cost (IOFC).

MATERIALS AND METHODS

A survey instrument including environmental, economic, and production aspects of dairy farm has been developed and field-tested in the summer and fall of 2010. On-farm data collection started in early winter 2010 and will continue through 2011. For this study, farms have been randomly selected from the southwest quadrant of Wisconsin. Dairy farms have been classified across 3 different feeding systems: Conventional, Grazing and Organic. Preliminary results from 3 organic, 3 grazing, and 2 conventional farms are presented.

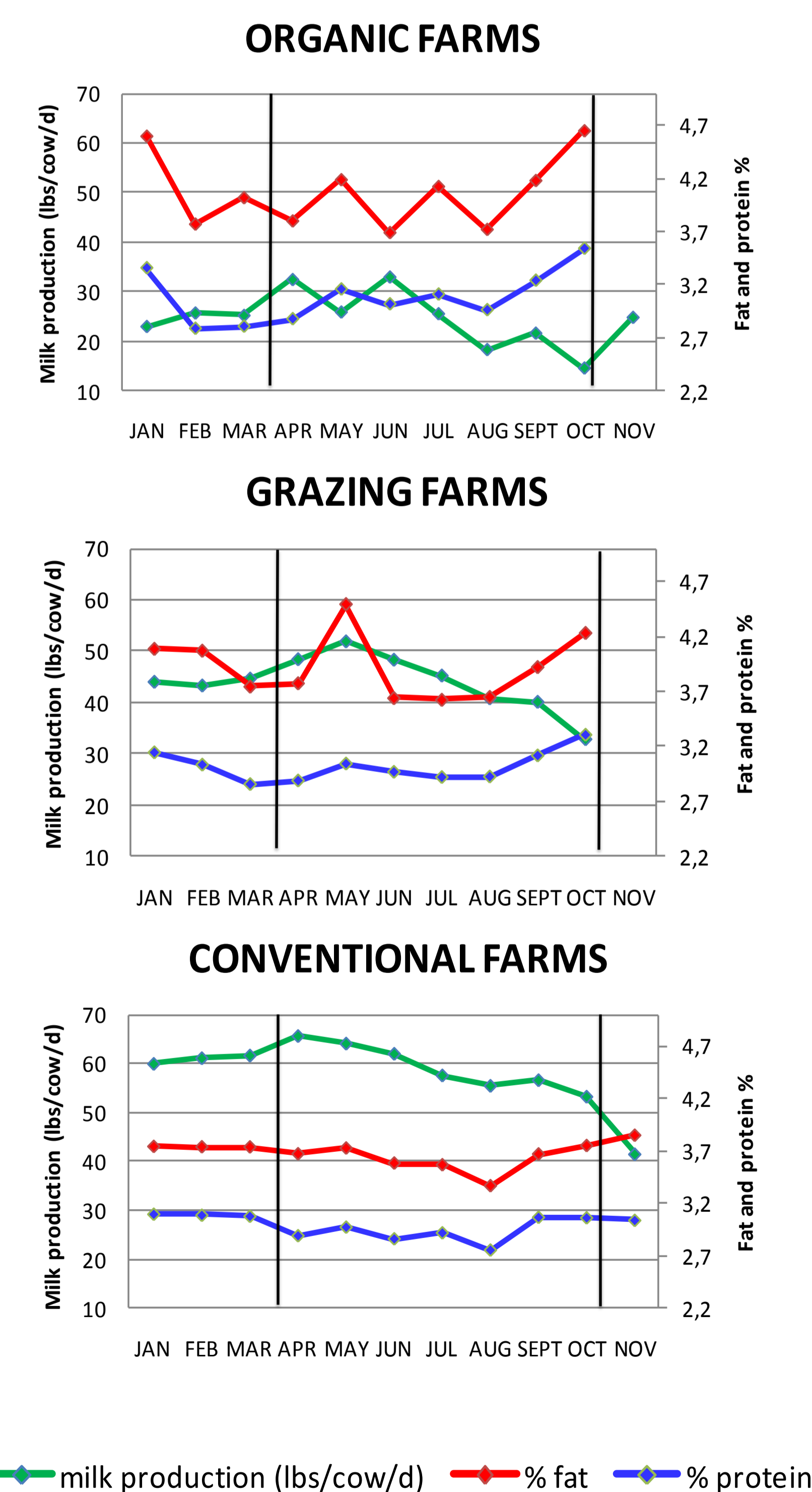
RESULTS

Figure 1: Feeding practices and dry matter intake (DMI; lbs/cow/day) excluding pasture on Wisconsin organic, grazing, and conventional dairy farms during year 2010.



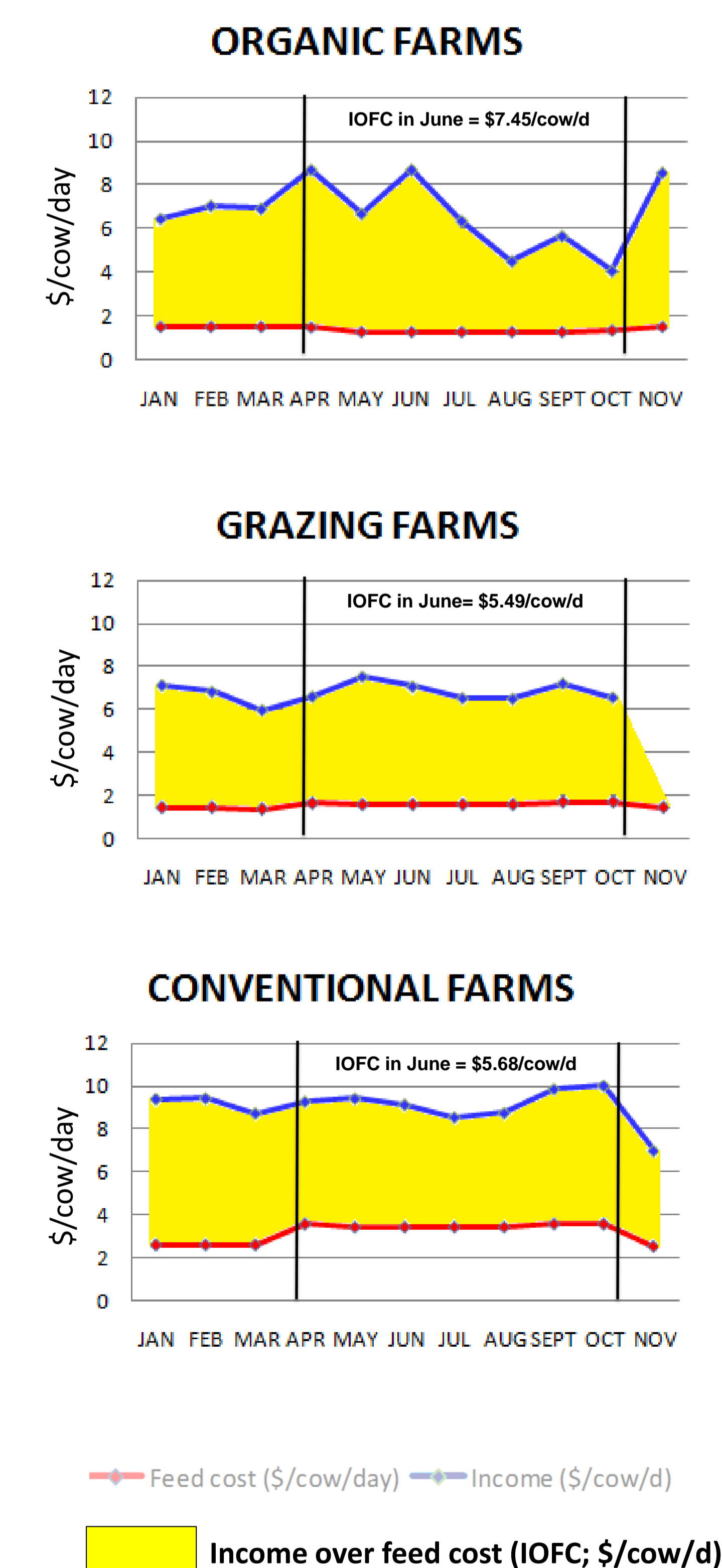
RESULTS

Figure 2: Milk production, fat % and protein % on Wisconsin organic, grazing, and conventional dairy farms during year 2010.



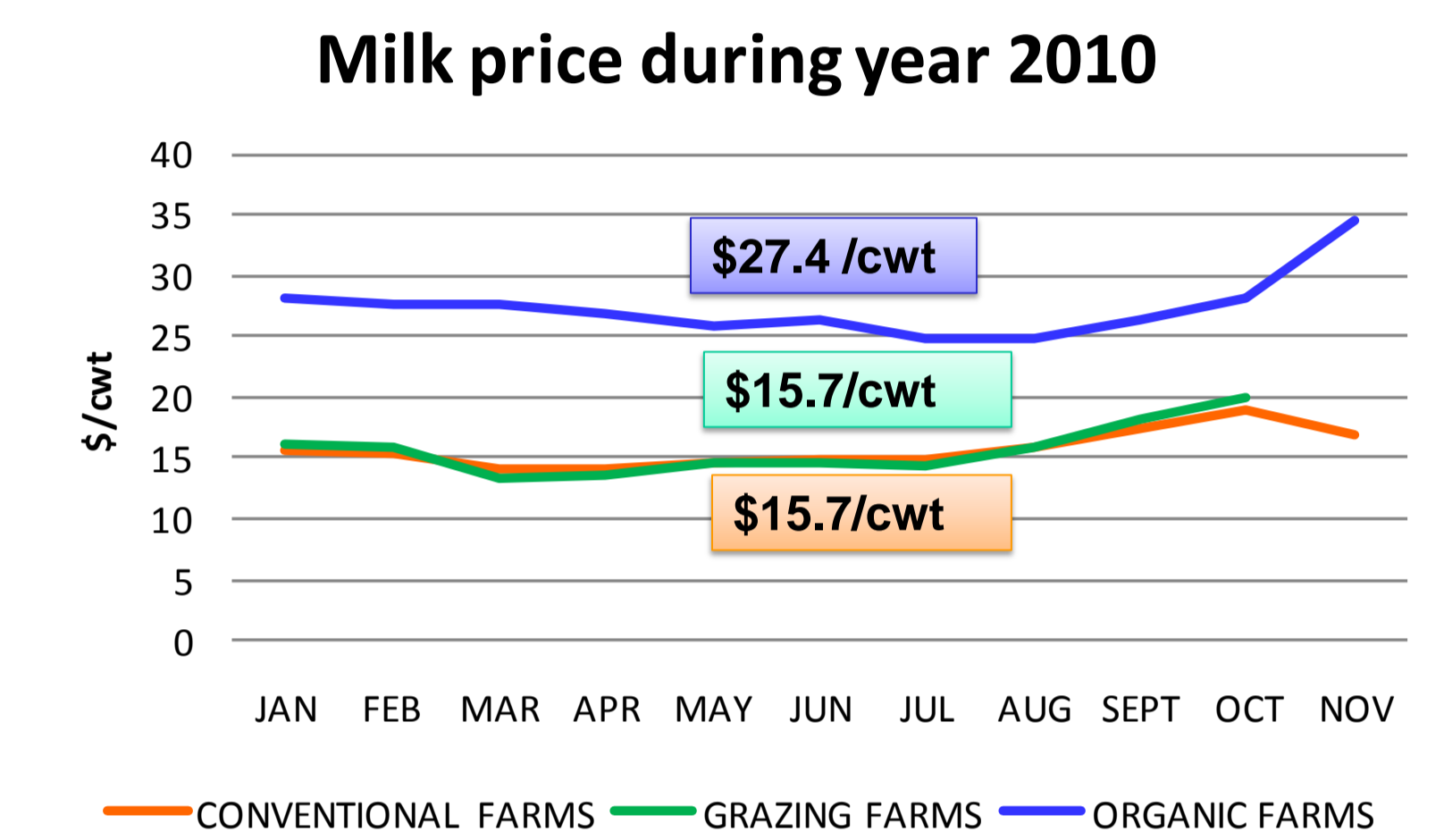
RESULTS

Figure 3: Milk income, feed costs (including an estimate of cost of pasture) and milk income over feed cost (\$/cow/d) on Wisconsin organic, grazing, and conventional dairy farms during year 2010.



RESULTS

Figure 4: Milk price (\$/cwt) on Wisconsin organic, grazing, and conventional dairy farms during year 2010.



SUMMARY & CONCLUSION

Conventional farms showed the least variation in ration composition which included corn silage, alfalfa hay, and concentrates made of both grain and protein mix throughout the year. These farms had highest milk production, and the most constant milk composition and IOFC across the year.

Total DMI and milk production was lowest on organic farms, intermediate on grazing and highest on conventional farms.

Organic and Grazing farms relied on pastures during the grazing season. Milk production, milk composition, and IOFC varied substantially more on organic than on grazing farms across the grazing season.

IOFC in June was approximately \$2.0/cow/day higher on organic farms than in the other two systems because of a \$11.7/cwt milk price advantage.

Our preliminary results indicated relatively similar IOFC in spite of substantial differences in total DMI, milk production and feeding strategies across systems. Given 2010 prices, organic farms could be as much sustainable as conventional or grazing systems when including the USDA organic dairy production standards.