

# **Forage Quality improvement in Reduced-Lignin Alfalfa Monocultures and Alfalfa-Grass Binary Mixtures**

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**This project addresses alfalfa and grass selection for improved nutritive value and investigates management options to achieve high nutritive value.**

**NIFA - AFRP**

# Why Alfalfa-Grass Mixtures?

- **When soils are not favorable to alfalfa.**
- **Reduced chance of heaving/winter kill.**
- **Less concern over manure application.**
- **Improved soil and water conservation.**
- **Maintain a full stand for more years.**
- **Increased resistance to insect pests.**
- **Faster field drying of mixed forage in field.**
- **Reduced bloat potential when grazing.**
- **Provide more balanced nutrition.**

# Management Plan

**Alfalfa:** *HarvXtra* vs. *WL355 RR*

**Grasses:** *BAR FpF32* Meadow fescue

*Fojtan* Festulolium

*Dividend VL* Orchardgrass

Pure stands of alfalfa & binary mixtures.

Harvest management: 2 cuts seeding yr.

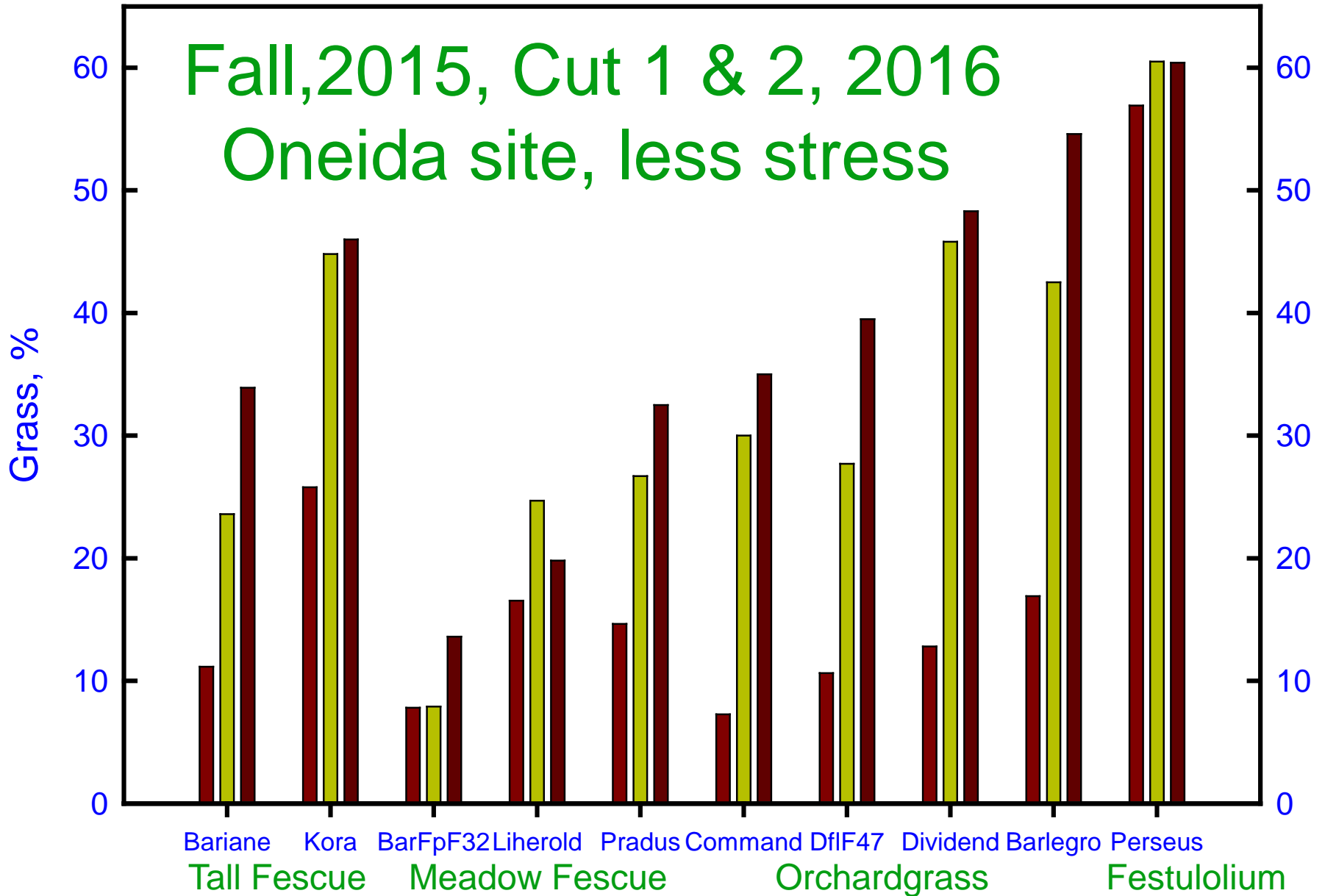
Late bud cut for increased quality vs.

Early flower cut for increased yield.

**Environment has a major impact on alfalfa-grass stands.**

# Grass component increases under less stress

Fall, 2015, Cut 1 & 2, 2016  
Oneida site, less stress



# Grass component decreases under stress

