
Table 1: Image analysis and artificial intelligence approaches tested.

Technique	Outcome	Date
Geometric pattern matching	No discreet patterns in mixed stand images	January to March 2012
Color separation	Grass and alfalfa shade of green too similar especially under variable field conditions	January to March 2012
Blob detection	Each piece must be a separate entity to work effectively	January to March 2012
Tile method with fast Fourier transform (Polder et al., 2007)	Expressed frequencies differ for alfalfa and grass	March to April 2012
+ Naïve Bayes Classifier Artificial Intelligence (AI) (McRoberts et al., 2012)	Poor correlation between predicted and actual values	April to June 2012
+ Fourier frequencies	Aggregated frequencies performed better than Naïve AI; collinearity problems with multivariate models	July 2012
+ Support Vector Machine: LIBSVM open source package (Chang & Lin, 2011)	Preliminary results most promising to date	July 2012 to present
