Title: Estimation of Apple Mealiness by means of Laser Scattering Measurement
Journal: Food and Bioprocess Technology
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SI1 List of calculated features from profiles and backscattered images

Type				Number of features
Profile features	Fitting coefficients	Exponential function		3
		Gaussian function		3
		Lorentzian		3
		Modified Lorentzian 2		2
		Modified Lorentzian 3		3
		Modified Lorentzian 4		4
		Modified Gompertz 2		2
		Modified Gompertz 3		3
		Modified Gompertz 4		4
		Gaussian-Lorentzian		5
		Farrell		2
	Gradient	1–29 mm at 1-mm intervals		28
Image features	Statistic	Mean, Standard deviation, Median, Mode, Skewness, Kurtosis, Energy, Entropy, Minimal gray level, Maximal gray level, Coefficient of variation, 10 percentile, 25 percentile, 75 percentile, 90 percentile, Histogram width, Area, Smoothness		18
	Texture	GLCM	Angular second moment, Contrast, Correlation, Sum of squares variance, Inverse difference moment, Sum average, Sum variance, Sum entropy, Entropy, Difference variance, Difference entropy, Information 1 measures of correlation, Information 2 measures of correlation, Maximal correlation coefficient	14
		NGTDM	Coarseness, Contrast, Busyness, Complexity, Strength	5
		SFM	Coarseness, Contrast, Periodicity, Roughness	4

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		LTE	Texture energy from LL kernel, Texture energy from EE kernel, Texture energy from SS kernel, Average texture energy from LE and EL kernels, Average texture energy from ES and SE kernels, Average texture energy from LS and SL kernels	6
		FDTA	Hurst Coefficients 1, 2, 3, 4	4
		GLRLM	Short run emphasis, Long run emphasis, Gray level non-uniformity, Run length non-uniformity, Run percentage, Low gray level run emphasis, High gray level run emphasis, Short low gray level emphasis, Short run high gray level emphasis, Long run low gray level emphasis, Long run high level emphasis	11
		FPS	Radial sum, Angular sum	2
		LPB	R1P8 energy, R1P8 entropy, R2P16 energy, R2P16 entropy, R3P24 energy, R3P24 entropy,	6
Total				132

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SI2 Result of two-way ANOVA

“Group”: Groups 1 and 2

“Storage period”: 0, 1, 2, 3, 4 weeks

	Sum of Squares	DF	F	p (α=0.05)
Group	225.57	1	4.05	0.046
Storage period	5718.1	4	25.69	5.21×10^{-17}
Group × Storage Period	578.4	4	2.60	0.0376
Residual	10517.9	189		

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SI3 Performance (R^2) each fitting function

Coefficients of determination were calculated for each wavelength

Fitting function	Coefficient of Determination (R^2)	
	633 nm	850 nm
Exponential	0.989	0.985
Gaussian	0.952	0.948
Lorentzian	0.994	0.993
Modified Lorentzian 2	0.974	0.964
Modified Lorentzian 3	0.982	0.977
Modified Lorentzian 4	0.999	0.999
Modified Gompertz 2	0.915	0.900
Modified Gompertz 3	0.965	0.960
Modified Gompertz 4	0.984	0.980
Gaussian-Lorentzian	0.994	0.993
Farrell's simplified function	0.999	0.999