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Title	1_Manuscript		
Name of Documents	1 Manuscript.doc		
Adjustment			

Comparison Scope	[All attached documents] [Copykiller DB]
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Comparison Summary

Plagiarism Rate	All Sentences	Same Sentences	Similar Sentences	Quoted/Cited	Law/Religious text
11%	86	0	26	8	0

Matching Comparison Documents

No.	Plagiarism Rate	Document Source	Adjustment
1	1%	[Copykiller DB] Copykiller - Name of Document : SPIE Proceedings [SPIE Asia Pacific Remote Sensing - Incheon, Republic of Korea (Monday 11 October 2010)] Multispectral, Hyperspectral, and Ultraspectral Remote Sensing Technology, Techniques, and Applications III - <title>Winter wheat nutrition diagn... - Author : Zhao, Ruijiao; Li, Minzan; Li, Shuqiang; Ding, Yongjun; Larar, Allen M.; Chung, Hyo-Sang; Suzuki, Makoto - Published : 2010	
2	1%	[Copykiller DB] Copykiller - Name of Document : On-site variety discrimination of tomato plant using visible-near infrared reflectance spectroscopy - Author : Hui-rong Xu, Peng Yu, Xia-ping Fu, Yi-bin Ying - Published : February 2009	
3	1%	[Copykiller DB] Copykiller - Name of Document : On-site variety discrimination of tomato plant using visible-near infrared reflectance spectroscopy - Author : Hui-rong Xu; Peng Yu; Xia-ping Fu; Yi-bin Ying - Published : 2009-02	
4	1%	[Copykiller DB] Copykiller - Name of Document : Discrimination of Blended Chinese Rice Wine Ages Based on Near-Infrared Spectroscopy - Author : Shen, Fei; Ying, Yibin; Li, Bobin; Zheng, Yunfeng; Liu, Xingquan - Published : 2012-11	
5	1%	[Copykiller DB] embs.papercept.net - Name of Document : ISBI 2018 Program Thursday April 5, 2018 - Published : embs.papercept.net	
6	1%	[Copykiller DB] Copykiller - Name of Document : Abstracts of Original Contributions ASNC2015 The 20th Annual Scientific Session of the American Society of Nuclear Cardiology - Published : 2015-8	
7	1%	[Copykiller DB] Copykiller - Name of Document : Isotope and REE Characterization of Groundwater Aquifers within the Aquifer Storage and Recovery Programme in Sukhothai (N.-Thailand) - Author : Manussawee Hengsuwan / Monthon Yongprawat / Klaus Simon / Bent T. Hansen / - Published : 2016-05-27	
8	1%	[Copykiller DB] Copykiller - Name of Document : Uso terapéutico y perfil de toxicidad del esquema FOLFOX4 - Author : B. Fernández-Lobato; M.S. Díaz-Carrasco; A. Pareja; M. Marín; N. Vila; A. de la Rubia - Published : 2009	
9	1%	[Copykiller DB] Copykiller - Name of Document : Abstract Session 1: Mechanism and Genetic Aspects of Arrhythmias Sunday, April 2, 2006, 10:30am-12:00pm - Published : 2006	

10	1%	[Copykiller DB] Copykiller - Name of Document : In-line monitoring of the conversion in UV-cured printed layers by NIR spectroscopy in an offset printing press - Author : Mirschel, Gabriele; Daikos, Olesya; Heymann, Katja; Scherzer, Tom; Genest, Beatrix; Sommerer, Carolin; Steckert, Carsten - Published : 2014-03
11	1%	[Copykiller DB] Copykiller - Name of Document : Exolaryngoscopy: a new technique for laryngeal surgery - Author : C. CARLUCCI / L. FASANELLA / A. RICCI MACCARINI - Published : October 2012
12	1%	[Copykiller DB] Copykiller - Name of Document : Kristina Blomberg
13	1%	[Copykiller DB] Copykiller - Name of Document : Dry powder aerosols generated by standardized entrainment tubes from drug blends with lactose monohydrate: 2. Ipratropium bromide monohydrate and fluticasone propionate - Author : Zhen Xu; Heidi M. Mansour; Tako Mulder; Richard McLean; John Langridge; Anthony J. Hickey - Published : 2010
14	1%	[Copykiller DB] Copykiller - Name of Document : Data-driven Uncertainty Quantification and Characterization for Household Energy Demand Across Multiple Time-scales - Author : Shi, Heng; Ma, Qiuyang; Smith, Nathan; Li, Furong - Published : 2018
15	1%	[Copykiller DB] www.statpower.net - Name of Document : Evaluating the Use of Exploratory Factor Analysis in ...
16	1%	[Copykiller DB] Copykiller - Name of Document : Evaluating the use of exploratory factor analysis in psychological research. - Author : Fabrigar, Leandre R.; Wegener, Duane T.; MacCallum, Robert C.; Strahan, Erin J. - Published : 1999
17	1%	[Copykiller DB] Copykiller
18	1%	[Copykiller DB] tu-freiberg.de - Name of Document : Download - TU Bergakademie Freiberg
19	1%	[Copykiller DB] Copykiller - Name of Document : [IEEE 2010 Sixth International Conference on Natural Computation (ICNC) - Yantai, China (2010.08.10-2010.08.12)] 2010 Sixth International Conference on Natural Computation - A novel approach for discrimination of human gait using kernel learning algo... - Author : Wu, Jianning - Published : 2010
20	1%	[Copykiller DB] Copykiller - Name of Document : Quality and composition traits in pork - Author : Russell Owen McKeith - Published : 2010
21	1%	[Copykiller DB] Copykiller - Name of Document : Structural and functional diversity of rhizobacteria associated withRauwolfiaspp. across the Western Ghat regions of Karnataka, India - Author : S. P. Prasanna Kumar, P. Hariprasad... - Published : 2014-01
22	1%	[Copykiller DB] Copykiller
23	1%	[Copykiller DB] Copykiller - Name of Document : Evaluating the use of exploratory factor analysis in psychological research - Author : Leandre R. Fabrigar, Robert C. Maccallum, Duane T. Wegener, Erin J. Strahan, Re R. Fabrigar, Erin J. Strahan, Department Of - Published : 1999
24	1%	[Copykiller DB] Copykiller - Name of Document : A review of recent variable selection methods in industrial and chemometrics applications - Author : Michel Jose Anzanello - Published : 2014

25	1%	[Copykiller DB] Copykiller - Name of Document : Boron nutrition for improving the quality of diverse canola cultivars - Author : Manaf, Abdul; Kashif, Muhammad; Sher, Ahmad; Qayyum, Abdul; Sattar, Abdul; Hussain, Sajid - Published : 2019-10-21
26	1%	[Copykiller DB] Copykiller - Name of Document : Overexpression of Acyl-ACP Thioesterases, CpFatB4 and CpFatB5, Induce Distinct Gene Expression Reprogramming in Developing Seeds of Brassica napus - Author : Nam, Jeong-Won; Yeon, Jjnouk; Jeong, Jiseong; Cho, Eunyoung; Kim, Ho Bang; Hur, Yoonkang; Lee, Kyeong-Ryeol; Yi, Hankuil - Published : 2019-07-06
27	1%	[Copykiller DB] www.statpower.net - Name of Document : Evaluating the Use of Exploratory Factor Analysis in ... - Statpower
28	1%	[Copykiller DB] Copykiller - Name of Document : Fault detection using dynamic time warping (DTW) algorithm and discriminant analysis for swine wastewater treatment - Author : B.H. Jun - Published : 2011
29	1%	[Copykiller DB] Copykiller - Name of Document : Monovarietal Extra Virgin Olive Oils. Correlation between Thermal Properties and Chemical Composition: Heating Thermograms - Author : Emma Chiavaro - Published : 200801
30	1%	[Copykiller DB] Copykiller - Name of Document : PhD starting in 2016 - Author : Irina Emily Hansen, Lars Giske, Fabrice Abunde Neba - Published : 2020

Target Document

Matching Comparison Text

Plagiarism Rate: **0%**

Rapid Discrimination of Brassica napus Varieties using Visible and Near-infrared (Vis-NIR) Spectroscopy Discrimination of canola varieties using Vis-NIR spectroscopy Abstract Brassica napus is an oilseed plant that is most ly used to produce edible oils, industrial oils, modified lipids and biofuels.

Plagiarism Rate: **20%**

The number of varieties/cultivars is high for the species, owing to their higher level of economic use. **The aim of this study is to assess the use of visible-near infrared (Vis-NIR) spectroscopy in combination with multiple chemometric methods that have been explored for the discrimination of eight Brassica napus varieties in Korea.**

[embs.papercept.net] ISBI 2018 Program | Thursday April 5, 2018

Published : embs.papercept.net

reduce the number of projections. **The aim of this study is to assess the use of compressed sensing to reduce dose**

[www.ncbi.nlm.nih.gov] Classification of brain tumor type and grade using MRI texture and ...

segment and classify brain neoplasms. **The aim of this study is to assess the discrimination ability of standard MR**

Plagiarism Rate: **24%**

In this study, the spectra from leaves of the eight B. napus varieties were measured in the Vis-NIR spectra **in the range of 325-1075 nm with a step of 1.5 nm in reflectance mode.**

[Copykiller] [American Society of Agricultural and Biological Engineers 2012 Dallas, Texas, July 29 - August 1, 2012 - ()] 2012 Dallas, Texas, July 29 - August 1, 2012 - Application of multi-spectral images and remote sensing in precision crop management

Author : Ruijiao Zhao, ; Minzan Li, ; Hong Sun, ; Yane Zhang, ; Wei Yang, Published : 2012

field spectrum radiometer(FieldSpec ASD) **in the range of 325-1075 nm with a resolution of 1nm. Before testing**

field spectrum radiometer(FieldSpec ASD) **in the range of 325-1075 nm with a resolution of 1nm. Before testing**

[Copykiller] SPIE Proceedings [SPIE International Conference of Optical Instrument and Technology - Beijing, China (Sunday 16 November 2008)] 2008 International Conference on Optical Instruments and Technology : Advanced Sensor Technologies and Applications - A spe...

Author : Wang, Anbo; Yang, Ce; Li, Minzan; Liao, YanBiao; Song, AiGuo; Cui, Di; Ishii, Yukihiko; Fan, Xudong
Published : 2008

measured by ASD spectrum radiometer **in the range of 325-1075 nm with a resolution of 1nm. We used**

Plagiarism Rate: **0%**

The spectral data were preprocessed with three different preprocessing methods and eight different chemometric analyses were used for effective discrimination.

Plagiarism Rate: **36%**

After the outlier detection, the samples were split into two sets, one serving as a calibration **set and the remaining one as a validation set.**

[www.nature.com] Efficient cross-trait penalized regression increases prediction ...Author : Wonil Chung, Jun Chen, Constance Turman, Sara Lindstrom, Zhaozhong Zhu, Po-Ru Loh, Peter Kraft, Liming Liang
Published : 2019/02/04

are used as a training **set and the remaining one as a validation set.**

[www.researchgate.net] (PDF) Efficient cross-trait penalized regression increases ...

are used as a training **set and the remaining one as a validation set.**

Plagiarism Rate: **0%**

When using multiple preprocessing and chemometric methods for the discrimination, the maximum classification accuracy was witnessed in the combination of standard normal variate and support vector machine up to 98.2%.

Plagiarism Rate: **0%**

The use of Savitzky-Golay filtersmoothing as a preprocessing method had the best and most satisfactory discrimination of all other chemometric methods.

Plagiarism Rate: **52%**

The results suggest that the use of handheld Vis-NIR **spectroscopy in combination with chemometric approaches can be used as an effective tool for the discrimination of** B. napus varieties in the field.

[en.wikipedia.org] DNA methylation - Wikipedia

Published : en.wikipedia.org

involved in epigenetic regulation. QDMR **can be used as an effective tool for the** quantification of methylation difference and

[www.science.gov] zno films doped: Topics by Science.gov

that the WSCCO2 technology **can be used as an effective tool for the** nadesign and property enhancement of

Plagiarism Rate: **21%**

Keywords Visible-near infrared; Spectroscopy; Brassica napus; Chemometrics; Deep learning; Preprocessing 1. Introduction Brassica napus, also known as rapeseed, oilseed rape and **canola, is one of the most important oil seed crop**; globally, it ranks third in oilseed production next to palm and soybean (Rahaman et al.

[Copykiller] Boron nutrition for improving the quality of diverse canola cultivars

Author : Manaf, Abdul; Kashif, Muhammad; Sher, Ahmad; Qayyum, Abdul; Sattar, Abdul; Hussain, Sajid
Published : 2019-10-21

oil and glucosinolate in meal. **Canola is one of the most important oil seed crop** due to higher nutritive composition

[Copykiller] g

Published : 2013

Soybean (Glycine max (L.) Merrill) **is one of the most important oil seed crop** cultivated in India (Anon., 2005

Plagiarism Rate: **0%**

2017). It belongs to the family Brassicaceae, which comprises 419 genera and 4,130 species. Further, the number of varieties in B.

Plagiarism Rate: **0%**

napus is massive and each variety was cultivated for its own characteristics. The innovative use of germplasm resources is strongly intertwined with rapeseed breeding and industrial growth (Hu et al.

Plagiarism Rate: **0%**

2021). Cultivation of different varieties/cultivars simultaneously in nearby fields may lead to complications in identification.

Plagiarism Rate: **0%**

Traditionally, morphological characters have been used to identify varieties. However, due to modern breeding technologies, a lack of phenotypic variation makes traditional morphological methods difficult to identify varieties (Xu et al.

Plagiarism Rate: **28%**

2009; Sohn et al. 2021a, b). Furthermore, current crop production necessitates rapid discrimination technologies. In recent years, much **research has been done on various techniques for realizing a robust identification method, such as molecular markers** and gene expression profiling, but these methods are not competent for field level assessment and they are both costly and time-consuming (Sohn et al.

[Copykiller] On-site variety discrimination of tomato plant using visible-near infrared reflectance spectroscopy

Author : Hui-rong Xu; Peng Yu; Xia-ping Fu; Yi-bin Ying
Published : 2009-02

years, a great deal of **research has been done on various techniques for realizing a robust identification method, such as molecular markers** (Cooke, 1995a; Lee et al

[Copykiller] On-site variety discrimination of tomato plant using visible-near infrared reflectance spectroscopy

Author : Hui-rong Xu, Peng Yu, Xia-ping Fu, Yi-bin Ying
Published : February 2009

years, a great deal of **research has been done on various techniques for realizing a robust identification method, such as molecular markers** (Cooke, 1995a; Lee et al

Plagiarism Rate: **47%**

2021a). Hence, it is imperative **to find a rapid method for the identification of** plant varieties in the environment.

[Copykiller] A single enzyme PCR-RFLP assay targeting V1-V3 region of 16S rRNA gene for direct identification of Alicyclobacillus acidoterrestris from other Alicyclobacillus species

Author : Sourri, Patra; Dougeraki, Agapi I.; Tassou, Chrysoula C.; Nychas, George-John E.
Published : 2019-4-19

The present study aims **to find a rapid method for the identification of** A. acidoterrestris. To achieve this

Plagiarism Rate: 0%

Near-infrared spectroscopy has rapidly progressed from a laboratory technique to a main tool for a wide range of qualitative and quantitative analysis applications.

Plagiarism Rate: 0%

In general, modern NIR spectroscopy, combined with chemometrics, has the advantages of speed, high efficiency, low cost, and non-destructiveness (Cozzolino, 2014; Sohn et al.

Plagiarism Rate: 56%

2021a). **It has been used in various industrial applications, including the food industry, petroleum chemical engineering, medicine, etc.**

[www.mdpi.com] DNA Damage, Cell Cycle Arrest, and Apoptosis Induction Caused ...

Author : Yedjou, Clement G., Tchounwou, Hervey M., Tchounwou, Paul B.
Published : 2015/12/22

and silver. Throughout history, lead **has been used in various industrial applications including the** manufacturing of fossil fuels, paint

[Copykiller] Hydrogenation of Nitrile and Olefinic Groups in Butadiene Rubbers

Author : Liu, Minghui
Published : 2014-07-15

high elongation at break.[130] **It has been used in various industrial applications, including** manufacture of tires, wire and

Plagiarism Rate: 0%

However, their usage in agricultural industry is important for quality assessment and discrimination of plants and weeds.

Plagiarism Rate: 0%

Hitherto, it has been used for the discrimination of plant varieties and species, and it has also been used for several agricultural and food characterizations (Cozzolino et al.

Sentence with Citations

Plagiarism Rate: 0%

2003; Sohn et al. 2021a). Generally, visible near infrared (Vis-NIR) spectroscopy is used for discriminating plants by measuring the amount of light absorbed by functional groups over the Vis-NIR region (due to vibrations produced from stretching and bending of H bonds associated with C, O, and N, etc.) (Martens and Naes, 1989).

Plagiarism Rate: 0%

The samples are grouped based on their spectral similarity and thus used for species discrimination and adulterations in foods.

Plagiarism Rate: 44%

The main aim of this study was to use Vis-NIR reflectance spectroscopy for the discrimination of eight commercial *B. napus* varieties in South Korea

[ejbio.imedpub.com] Kinetic Study of The Growth of *Lactobacillus bulgaricus* and ...

an economic and strategic interest. **The main aim of this study was to use** of *Lactobacillus bulgaricus* and *Streptococcus*

[www.frontiersin.org] Genetic Resources in the "Calabaza Pipiana" Squash (*Cucurbita argyrosperma*) in Mexico: Genetic Diversity, Genetic Differentiation

C. argyrosperma throughout its range. **The main aim of this study was to use** molecular data (microsatellites) to assess

Plagiarism Rate: 0%

The precise goals were (1) to assess the potential of handheld Vis-NIR spectroscopy to discriminate the plant varieties and (2) to compare the eight chemometric methods and their combinations with different preprocessing techniques for the effective discrimination of different *B. napus* varieties.

Sentence with Citations

Plagiarism Rate: 0%

2. Materials and Methods 2.1. Plant materials Eight varieties of oilseed rape belonging to the *B. napus* L. variety were selected from the Korean peninsula with the following local names: 'Youngsan' 'Hanla' 'Joongmo 7002' 'Joongmo7001' 'Naehan' 'Tajla' 'Tammi'. A commercial variety, 'Westar' (Figure 1) was also procured from the National Agrobiodiversity Center, Jeonju, Republic of Korea.

Plagiarism Rate: 38%

All the varieties were grown in soil pots at the greenhouse of [the National Institute of Agricultural Sciences, Jeonju, Republic of Korea](#), during May-July 2020.

[Copykiller] The complete mitochondrial genome sequence of *Schisandra chinensis* (Austrobaileyales: Schisandraceae)

Author : Baek, Jeong-Ho; Kim, Hyo-Jin; Kang, Sang-Ho; Kwon, Soo-Jin; Kim, Chang-Kug
Published : 2019-07-03

Engineering Division, Rural Development Administration, [National Institute of Agricultural Sciences, Jeonju, Republic of Korea](#); bARES Medicinal Resource Research Institute Republic of Korea; cGenomics Division, [National Institute of Agricultural Sciences, Jeonju, Republic of Korea](#) ABSTRACT ARTICLE HISTORY Chinese magnolia

[Copykiller] Overexpression of Acyl-ACP Thioesterases, CpFatB4 and CpFatB5, Induce Distinct Gene Expression Reprogramming in Developing Seeds of *Brassica napus*

Author : Nam, Jeong-Won; Yeon, Jinouk; Jeong, Jiseong; Cho, Eunyoung; Kim, Ho Bang; Hur, Yoonkang; Lee, Kyeong-Ryeol; Yi, Hankuil
Published : 2019-07-06

in greenhouse conditions located in [the National Institute of Agricultural Sciences Jeonju, Republic of Korea](#)). 4.2. FA Analysis Seed

Plagiarism Rate: 0%

A total of 80 plants were used in this study, 10 samples from each of the eight varieties (8x10=80).

Plagiarism Rate: 20%

2.2. Vis-NIR spectral datacollection The Vis-NIR diffuse reflectance spectra of intact leaves of eight *B. napus* varieties were acquired using a handheld integrated portable spectrum analyzer (FieldSpec HandHeld 2, ASD Inc., Longmont, [CO, USA](#)) in the range of 325-1075 nm with a stepping of 1.5 nm in reflectance mode (log/R).

[Copykiller] SPIE Proceedings [SPIE Asia Pacific Remote Sensing - Incheon, Republic of Korea (Monday 11 October 2010)] Multispectral, Hyperspectral, and Ultraspectral Remote Sensing Technology, Techniques, and Applications III - <title>Winter wheat nutrition diagn...

Author : Zhao, Ruijiao; Li, Minzan; Li, Shuqiang; Ding, Yongjun; Larar, Allen M.; Chung, Hyo-Sang; Suzuki, Makoto
Published : 2010

radiometer (FieldSpec ASD) in the range of 325-1075 nm with a resolution of 1nm. Before testing

[Copykiller] Application of a Semianalytical Algorithm to Remotely Estimate Diffuse Attenuation Coefficient in Turbid Inland Waters

Author : Yang, Wei; Matsushita, Bunkei; Chen, Jin; Yoshimura, Kazuya; Fukushima, Takehiko
Published : 2014-6

spectroradiometer (Analytical Spectral Devices, Boulder, [CO, USA](#)) in the range of 325-1075 nm at 1-nm intervals. The

Plagiarism Rate: 0%

The spectra were taken on the fully inflated leaves' adaxial surface, which may easily capture light. In each group, 10 spectra were acquired from three distinct sections of the leaf blade.

Plagiarism Rate: 0%

Each group yielded a total of 300 spectra (3x10x10 = 300) to use for further investigation. To remove unnecessary noise, the Vis-NIR device's optical window was placed directly on the leaf's face during each spectrum capture, ensuring that the sensor window was entirely covered.

Plagiarism Rate: 0%

2.3. Preprocessing and Chemometric analysis In general, the background signals appeared in the raw spectra of samples due to the system setting and external noise.

Plagiarism Rate: **0%**

Hence, to minimize spectral noise and increase the accuracy of modeling approaches, different preprocessing methods, namely, normalization (area), standard normal variate (SNV), and derivatives (Savitzky-Golay (first differentiation)) were applied.

Plagiarism Rate: **0%**

The effectiveness of preprocessing methods was compared with raw spectra. Unscrambler X software, version 10.5.1, was used to execute the preprocessing computations (CAMO ASA, Oslo, Norway).

Plagiarism Rate: **0%**

Several machine learning approaches were utilized and compared for effective visualisation and discrimination of spectral data.

Plagiarism Rate: **17%**

RapidMinerStudios **Version 9.0.002 (RapidMiner, Inc., Boston, MA, USA)** was used for the modeling. In this study, deep learning, decision tree, support vector machine (SVM), random forest, generalized linear model, rapid large margin, Naive Bayes, and linear discriminant analysis were employed to discover the optimal modeling strategy with the highest classification accuracy.

[Copykiller] 근적외선 분광법을 이용한 10종 침엽수의 기계학습 기반 식별

Author : 김태성

was performed within RapidMiner studios **Version 9.0.002 (Rapidminer, Inc., Boston, MA, USA)**. Rapidminer is a software used

[Copykiller] Machine learning based identification of ten conifer species using near-infrared spectroscopy = 근적외선 분광법을 이용한 10종 침엽수의 기계학습 기반 식별

Author : Kim Tae Seong

Published : 안성 : 한경대학교 대학원, 2019.2

was performed within RapidMiner studios **Version 9.0.002 (Rapidminer, Inc Boston, MA, USA)**. Rapidminer is a software used

Plagiarism Rate: **0%**

The Aquap2 package developed by Pollner and Kovacs, (2014) was also used to apply the different preprocessing techniques and to perform linear discriminant analysis in R-studio.

Plagiarism Rate: **0%**

The inputs for each method were the spectral data points, and the classes were the identifying labels for eight *B. napus* varieties.

Plagiarism Rate: **44%**

For the reliability of the models in predicting multiple sample types, **cross-validation was performed. The data was divided into two sets for this purpose: a training set and a validation set.**

[Copykiller] Kristina Blomberg

model would be in practice, **cross validation was performed. The data was divided into two** subsets; one training set and

[Copykiller] [ACM Press the 2009 international conference - Cambridge, Massachusetts, USA (2009.11.02-2009.11.04)] Proceedings of the 2009 international conference on Multimodal interfaces - ICMI-MLMI '09 - Detecting user engagement with a robot companion using t...

Author : Castellano, Ginevra; Pereira, André; Leite, Iolanda; Paiva, Ana; McOwan, Peter W.

Published : 2009

leave-one-subject-out" **cross-validation was performed: the data was divided into 8 dif-**

Plagiarism Rate: **41%**

The training set had two-thirds **of the data and the rest was used as the validation set. The data splitting was done three times in order to make sure that each** sample was tested at least once in the calibration and validation set.

[Copykiller] Teaching Vocabulary to Deaf Students Through Enriched Subtitling: A Case Study in Qatar

Author : Ragia Hamdy Hassan, Josélia Neves

Published : 2019

this version, each word appeared **three times. In order to make sure that each** word appeared three times, the

[Copykiller] Using Feature Weights to Improve Performance of Neural Networks

Author : Iqbal, Ridwan Al

Published : 2011-01-25

were then trained using 50% **of the data and the rest was used as test set.** Experiments are averaged

Plagiarism Rate: **24%**

2.4. Statistical Analysis The influence of (1) the scatter correction method, (2) the eight machine learning methods, and (3) the interaction between preprocessing and machine learning methods **was determined using one-way analysis of variance (ANOVA)**.

[www.nature.com] Protective effect of pre- and post-vitamin C treatments on UVB ...

Published : www.nature.com

statistical differences between experimental groups **was determined using one-way analysis of variance (ANOVA)** followed by Dunnett's or

[molecularbrain.biomedcentral.com] Chronic restraint stress induces hippocampal memory deficits by ...

Author : Woo, Hanwoong, Hong, Caroline Jeeyeon, Jung, Seonghee, Choe, Seongwon, Yu, Seong-Woon
Published : 2018/07/03

the mean (SEM). Statistical significance **was determined using one-way analysis of variance (ANOVA)** and Tukey's post-test

Plagiarism Rate: **50%**

Tukey's range test was employed as a mean comparison **procedure with a significance level of $p \leq 0.05$** .

[www.nature.com] A comprehensive study of the hormetic influence of biosynthesized AgNP....

Published : www.nature.com

Duncan's multiple range test **with a significance level of $p \leq 0.05$** . Data Availability All data generated

[www.mdpi.com] The NOAEL Metformin Dose Is Ineffective against Metabolic ... - MDPI

Author : Sarmiento-Ortega, Víctor Enrique, Brambila, Eduardo, Flores-Hernández, José Ángel, Díaz, Alfonso, Peña-Rosas, Ulises, Moroni-González, Diana, Aburto-Luna, Violeta, Treviño, Samuel
Published : 2018/09/10

a Student unpaired t-test **with a significance level of $p \leq 0.05$** .

Plagiarism Rate: **39%**

3. Results and Discussion 3.1. Spectral analysis and preprocessing Figure 2 shows the average Vis-NIR spectra obtained from the eight B.

[Copykiller] Synthesis and Antifouling Capability of New Mixture Ratio Coating Containing Methoxysilane Moiety

Author : Wang, Qiang; Yu, Zhuan Ni; Yu, Liang Min
Published : 2012-1

AM 4.97 **3 Results and Discussion 3.1 Spectral analysis and** coating performance The formation of

[Copykiller] Ultra high performance liquid chromatography coupled to quadrupole time-of-flight with MSE technology used for qualitative analysis of non-volatile oxidation markers in sliced packed mushrooms (*Agaricus Bisporus*)

Author : Wrona, Magdalena; Pezo, Davinson; Canellas, Elena; Nerín, Cristina
Published : 2016-1

to determine the oxidation markers. **3. Results and discussion 3.1. Spectral analysis and** migration tests In the case

Plagiarism Rate: **0%**

napus varieties. That includes raw spectra and preprocessed with three different preprocessing methods. The raw spectra (Figure 2A) are the spectra with no changes.

Plagiarism Rate: **0%**

However, otherspectra (Figure 2B-2D) were preprocessed with three different methods, namely Savitzky-Golay, standard normal variate and normalization, respectively.

Sentence with Citations

Plagiarism Rate: **0%**

There are numerous crossovers and overlapping across the eight samples (Figure 2); in other words, the spectra of each variety are quite similar to those of other variations.

Plagiarism Rate: **33%**

Consequently, discrimination of varieties directly based on absorbance spectra is difficult. **Therefore, it is necessary to use machine learning methods** for the effective discrimination of eight varieties.

[Copykiller] 침입 탐지 시스템 구현을 위한 hidden Markov model의 연구

Author : 김인영
Published : 서울대학교 대학원 : 전기.컴퓨터공학부 2001

the new patterns of intrusion. **Therefore, it is necessary to use machine learning methods** to be prepared to cope

[bi.snu.ac.kr] 침입 탐지 시스템 구현을 위한 Hidden Markov Model의 ... - 서울대학교

Therefore, it is necessary to use machine learning methods to be prepared to cope

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From 325 to 550 nm, the spectral curve is flat and between 550 and 600 nm there is a small peak before dropping back to their normal position.

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This demonstrates that the leaves actively absorb blue (400-500 nm) and red (680 nm) light while reflecting green light (550 nm) in the visible range (Li and He, 2008) which is responsible for chlorophylls and carotenoids (Xu et al.

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2009; Smith et al. 2017). From 650 to 750 nm, there was a sharp increase in the peak that remained the highest absorbance value; later, there were no variations in the remaining wavelength until 1200 nm.

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The spectra were preprocessed to reduce systemic noise and emphasized differences between samples. Using a number of preprocessing methods simultaneously will help us obtain a greater degree of classification accuracy and will allow us to select the best preprocessing approach for each sample (Feng et al.

Plagiarism Rate: 27%

2017; Sohn et al. 2022). It is difficult to discriminate the plant varieties only with the spectra shown in Figure 2. For effective discrimination, Vis-NIR spectroscopy was combined with several models and machine learning methods such as discriminant analysis and principal component analysis (PCA) (Sohn et al.

[Copykiller] Fault detection using dynamic time warping (DTW) algorithm and discriminant analysis for swine wastewater treatment

Author : B.H. Jun
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Multivariate statistical data analysis methods such as discriminant analysis and principal component analysis (PCA), were used to classify the

[Copykiller] Regularisation, interpolation and visualisation of diffusion tensor images using non-Euclidean statistics

Author : Zhou, Diwei Dryden, Ian L. Koloydenko, Alexey Audenaert, K.M.R. Bai, Li
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shown that essentially all statistical and machine learning methods such as discriminant analysis and clustering, also work well with

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2021a). To investigate the qualitative differences between the eight *B. napus* varieties, PCA analysis was performed using raw spectra.

Plagiarism Rate: 44%

PCA analysis is a powerful data mining technique. The principle of PCA is to determine the linear combinations of the initial variables that contribute to the differences between samples (Li et al.

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Author : Fabrigar, Leandre R.; Wegener, Duane T.; MacCallum, Robert C.; Strahan, Erin J.
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That is, the objective of PCA is to determine the linear combinations of the measured variables that retain as

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That is, the objective of PCA is to determine the linear combinations of the measured variables that retain as

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2007). These combinations are referred to as principal components (PCs). As shown in Figure 3A, all of the different PCs showed the same slight pattern of separation for the different samples in the PCA paired plot from PC1 to PC6, but PC1 vs.

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Author : Kambic, Robert Emmett.
Published : 2008

of the sample (Manly, 2005). These combinations are referred to as principal components (PCs) and the coefficients of the

Plagiarism Rate: 0%

PC2 (Figure 3B) showed the most visual differences. Therefore, outlier detection was performed using these two PCs before initiating preprocessing for the machine learning methods.

Plagiarism Rate: 0%

Generally, the computerized iterations make PC1 have the maximum amount of information and PC2 have the maximum share of residual information (Li et al. 2007).

Plagiarism Rate: 20%

3.2. Chemometric Analysis for Discrimination of eight B. napus varieties The potential of visible-NIR spectroscopy to discriminate or identify plant varieties is based on leaf spectral properties related to biochemical composition and structure, which are influenced by a variety of factors such as plant species, leaf development or microclimate position of the plant, etc.

[www.mdpi.com] In Vitro Evaluation of Adhesion Capacity, Hydrophobicity, and Auto ...

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results, because cell adhesion properties are influenced by a variety of factors such as the composition of the culture

[microbiomejournal.biomedcentral.com] Characterization of the total and viable bacterial and fungal communit....

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to that indoor environment that are influenced by a variety of factors such as building design, ventilation, humidity, air

Plagiarism Rate: 0%

(Jacquemoud and Ustin, 2001; Xu et al. 2009). To determine the most accurate method for distinguishing eight B. napus varieties, the classification accuracy of various chemometric methods combined with different preprocessing methods was assessed.

Plagiarism Rate: 33%

Table 1 shows a summary of the classification accuracy for the various methods. The classification accuracy of the various methods ranged from 2.0 to 98.2%.

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Author : Frantzeskou, GMacDonell, SGStamatatos, EGeorgiou, SGritzalis, S

Published : 2012-03-10

obtained from the t-tests. Table 1 shows a summary of the classification accuracy results achieved for the four

Plagiarism Rate: 0%

Both raw and preprocessed spectra analyzed using chemometric methods demonstrated effective discrimination with diverse classification accuracies.

Plagiarism Rate: 0%

In most chemometric analyses, however, preprocessed spectra were found to have a higher classification accuracy than raw spectra.

Plagiarism Rate: 0%

In some cases, the use of raw spectra yielded very less classification accuracy with the use of Decision tree (21%), Random Forest (22%) and Naïve Bayes (28.9%).

Plagiarism Rate: 0%

The maximum classification accuracy (98.2%) was achieved with the preprocessing method standard normal variate (SNV) in combination with support vector machine (SVM).

Plagiarism Rate: 0%

As shown in Table 1, among different preprocessing methods, Savitzky-Golay found to have higher classification accuracy with the combination of all other chemometric methods with a range of 55.6 to 97.9%.

Plagiarism Rate: 0%

Among the different chemometric analyses, SVM, deep learning, linear discriminant analysis and fast large margin were found to have higher levels of classification accuracy (SVM/SNV, 98.2%; deep learning/SG, 97.9%; SVM-SG, 96.8%; LDA-SNV, 95.2%; FLM/SG, 95.1%).

Plagiarism Rate: **22%**

Even when using the raw spectrum without preprocessing the data, the SVM model had a high accuracy of 78.8%. The SVM **is particularly well suited to high-dimensional data because** the value of each attribute is arbitrary (Gaye et al.

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Author : Niels Goet Niels Goet
Published : 2019

member. The machine learning approach **is particularly well suited to high-dimensional data because** we avoid the problem of

Plagiarism Rate: **45%**

2021). Overall, the combination of SVM and SNV **was found to be more effective in the discrimination of** eight B. napus varieties.

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Author : Emma Chiavaro
Published : 200801

thermograms into their constituent peaks **was found to be more effective in the discrimination of** the

Plagiarism Rate: **0%**

The preprocessing method Savitzky-Golay (97.9%) was the best preprocessing method for use with multiple chemometric methods.

Plagiarism Rate: **0%**

Previously, several reports used multiple preprocessing and chemometric methods for discriminating between of plant varieties.

Plagiarism Rate: **0%**

For the discrimination of potato tuber varieties, Yee et al. (2006) used NIR spectra in combination with LDA analysis, resulting in a classification accuracy of 93%.

Sentence with Citations

Plagiarism Rate: **0%**

Chen et al. (2007) studied the differentiation of three tea varieties using SVM. Similarly, Vis-NIR spectroscopy combined with artificial neural networks (ANN) discriminated tea plant varieties with an accuracy of 77.3% (Li and He, 2008).

Plagiarism Rate: **46%**

Xu et al. (2009) used **PCA, linear discriminant analysis (LDA), and discriminant partial least squares (DPLS) regression** methods for the on-site discrimination of tomato varieties.

[Copykiller] Discrimination of Blended Chinese Rice Wine Ages Based on Near-Infrared Spectroscopy

Author : Shen, Fei; Ying, Yibin; Li, Bobin; Zheng, Yunfeng; Liu, Xingquan
Published : 2012-11

by principal component analysis **PCA linear discriminant analysis (LDA), and discriminant partial least squares (DPLS) regression**. MATERIALS AND METHODS Wine Samples

[Copykiller] A review of recent variable selection methods in industrial and chemometrics applications

Author : Michel Jose Anzanello
Published : 2014

inserted into two classificatory techniques: **linear discriminant analysis (LDA) and discriminant partial least squares (DPLS)**. The dataset consisted of 400

Plagiarism Rate: **0%**

The LDA plot for the discrimination of eight B. napus varieties is shown in Figure 4. The variety "Hanla" was completely separated from the clusters of other varieties, while other clusters of the other seven varieties were closely placed.

Plagiarism Rate: **0%**

This suggests that the other seven varieties share a higher level of similarity in their biological composition, whereas "Hanla" shares very little with the other varieties.

Plagiarism Rate: **0%**

Previously, the LDA analysis has been used for the discrimination of several plant varieties, such as sprouted mung bean (Tjandra et al. 2021) and melon varieties (Li et al. 2019).

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3.3. Selection of significant preprocessing and chemometric methods for discrimination The efficiency of preprocessing and machine learning approaches were statistically analyzed (Table 2).

Plagiarism Rate: 0%

After cross-validation, the mean percentage of classification accuracy of each chemometric method combined with various preprocessing methods revealed the significant modeling for the discrimination of eight B.

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napus varieties (Table 2). The statistical analysis using ANOVA (Table 3) revealed that the sum of square and mean sum of square values had statistical significance at $p \leq 0.0001$.

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However, when a combination of preprocessing and multiple machine learning approaches was used, there was no significance at $p \leq 0.0001$ (p value of 0.0003).

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The confusion matrix illustrates the degree of error in the identification of the assessed plants, suggesting that SNV combined with SVM was the most accurate classification method (Table 4).

Plagiarism Rate: 0%

Similar results were witnessed by the use of Vis-NIR spectroscopy in the discrimination of *Amaranthus* sp. (Sohn et al. 2021b).

Plagiarism Rate: 0%

4. Conclusions In conclusion, a simple and rapid discrimination method for B. napus varieties was established using Vis-NIR spectroscopy combined with different machine learning methods.

Plagiarism Rate: 0%

Among the different combinations of preprocessing and machine learning methods used, the combination of SNV and SVM was found to be more accurate with higher classification accuracy (98.2%) followed by deep learning and Savitzky-Golay (97.9%).

Plagiarism Rate: 0%

However, the Savitzky-Golay smoothing also performed well with other chemometrics compared to SNV, suggesting that it has more potential for discrimination when using multiple chemometric methods.

Plagiarism Rate: 0%

Therefore, it is concluded that this nondestructive method of using handheld Vis-NIR spectroscopy in combination with chemometric methods can be used in the field for the discrimination of plant varieties for rapid identification.

Plagiarism Rate: 0%

It is also suggested that a database be created with large-scale germplasm collections of *B. napus* and/or other plant varieties for the effective utilization of the technology globally.