Evaluating Effects of Travel-resonance Method with Color Soy Source and Clear Water on Substance using Fractal Dimension Analysis of Awareness Outward-form

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> Abstracts: Soy source has a useful effect on the human body and is the important ingredients in various foods and is an important factor of food engineer that tastes food ingredients. The forming model of the soy source was configured asymmetrical on the fractal surface and mixed with water using travel-resonance method to change a certain amount of viscosity into the shape of the surface. Travel mutational-status technology is structured the resonance status for rainbow dot pattern of the glitter awareness rate (GAR) and inequality awareness rate (IAR) on soy source travel awareness outward-form. Awareness rate condition by soy source travel awareness outward-form is structured with the circulate resonance system. Rainbow dot pattern of the happen mutational-status is to check up to structure of soy source travel value with travel layer location by the circulate-down structure. Concept of awareness rate is check up the reference of glitter rate and inequality rate for mutational-status signal by soy source travel resonance outward-form. Happen mutational-status of the GAR-IAR is presented position value of maximum-minimum on soy source travel-resonance outward-form. Far mutational-status of the Tr-aof-FA-Ψ_{MAX-MIN} presented the travel value with 14.67±7.32 units. Convenient mutational-status of Tr-aof-CO-WMAX-MIN presented the travel value with 4.48±0.46 units. Flank mutationalstatus of the Tr-aof-FL-4/MAX-MIN presented the travel value with 1.29±0.32 units. Vicinage mutational-status of the Tr-aof-VI-WMAX-MIN presented the travel value with 0.23±0.07 units. Circulate resonance will be to inquire into at the ability of soy source travel-resonance outward-form for the restrain degree awareness rate on the GAR-IAR that is stick-out the happen glitter and inequality outward-form by the awareness rate system. Awareness outward-form LED will be to inquire into of outward-form by the inequality signal and to figure a travel data of circulate resonance rate by the circulate awareness system. due to the effect of image resolution.

Keywords: Glitter awareness rate, Soy source travel outward-form, Circulate awareness system, Circulate resonance.

1. INTRODUCTION

Soy sauce was created about 2,200 years ago in current form, and it has spread throughout East and Southeast Asia where it is used in cooking and as a condiment [1,2]. Soy sauce is made either by fermentation or by hydrolysis, and some commercial sauces have both fermented and chemical sauces. Soy sauce during production is made flavor, color, and aroma developments are attributed to non-enzymatic substance [3,4]. During used Bacillus spp. (genus) is likely to grow in soy sauce ingredients, and to generate odors and ammonia. Lactobacillus species makes a lactic acid that increases the acidity in the feed [5,6]. The chemical composition of soy sauce is affected by the proportions of raw materials, fermentation methodologies, fermenting molds and strains, and post-fermentation treatments. The formation mechanism of chemical composition in soy sauce is complex, it considered as that free amino acids, water-soluble peptides [7,8].

The primary fermentation of lactic-acid-fermenting halophiles lowers the pH of the moromi, and this directly results in the acidic pH range (4.4–5.4) of soy sauce products. The secondary fermentation conducted by heterofermentative microbes provides soy sauce with a wide range of flavor and odorant compounds by breaking down macro-nutrients. Soy proteins and grain proteins are hydrolyzed into short peptide chains and free amino acids [9].

Soy sauce is currently one of the most important food ingredients in many parts of the world due to its good nutrition for human and daily life. Soy sauce is a new immobilization method based on the adsorption of fine substances such as Bacillus subtile and Lichenformis to the adhesive coating material for use in chemical composition. Substance variation is characterized complex things presented in nature by using the property of normal mutational-status (NMS) which was originally mean by little part. Structure pattern variation is broken down individual reduced parts original one in order to maintain self-similarity (SS) [10].

Resonance mutational-status (RMS) of the physical phenomenon is based is the simple interplay of substance and Coulomb forces acting on any pair of objects happen into close proximity. Circulate resonance system is appeared by class of discrete methods for soy source travel elements on the substance. The soy source travel elements proximity is appeared by extremely practical and valuable for adjacent application, they are subject to a significant figure period which is controlled by the level of discrete in other the location. Circulate resonance is an important differentiation because all methods for calculating variation dimension is applicable the particulate-travel versions on soy source travel elements, and structures having complicated substance variation distributions for the variation dimension [11].

Resonance status of soy source travel awareness technology is studied to structure the mutational-status of the substance for rainbow dot pattern with glitter and mutational-status by soy source travel awareness outward-form. Glitter and inequality value is produced the glitter rate (GR) and inequality rate (IR) with awareness function that stick-out to acquire a basis reference from travel layer. GR-IR is stick-out a position of the rainbow dot pattern, and check up soy source travel value with circulate-down layer on the substance. Soy source travel-resonance check up the ability of the mutational-status function with happen degree. Soy source travel awareness outward-form is build up the glitter awareness rate and inequality awareness rate.

2. RELATED LITERATURE

2.1. Soy Source Travel-resonance Method Sequence

Soy source is currently one of the most important ingredients in many foods as it has beneficial effects on the human body. New methods of food engineering based on the taste of food materials for use in water viscosity can be found. The formation model of the soy source constitutes a fractal asymmetric surface, and it is mixed with water to form a change in the shape of the surface with a certain amount of viscosity.

After irradiating the surface with a constant wavelength LED using soy source travel-resonance method, the components of the material are checked within a certain period of time, and the characteristics are confirmed by the degree of spread of the changed shape generated on the surface of the material.

Soy source travel awareness outward-form (SsTr-aof) is appeared the properties of rainbow dot outward-form on the substance. Circulate down layer position activity is analogized the happen structures by the glitter down rate (GDR). The results of GDR are modified restriction of travel resonance rate (Tr-RR). Soy source travel resonance outward-form (SsTr-ROF) is structured of with substance of soy source travel resonance structures in the glitter activity and inequality activity (Figure 1)[12,13]

2.2. Circulate Down Layer Position System

Soy source travel awareness outward-form system (SsTr-aofs) is use of properties formation on travelresonance method with colour soy source. Properties of Tr-aof is employ the happen circulate rate that is similar to a restrain travel-resonance by circulate down layer position technology (CDLPT). Happen travel resonance is structured in the circulate location outward-form that is tempted by soy source travel layer (SsTr-L) tool. Tr-aof is location of arithmetic properties with output-restrictions by soy source travel structures (Tr-R) in the circulate location outward-form. Soy source travel-resonance outward-form (Tr-ROF) by Tr-aof is employ to the location of output-restrictions by the circulate awareness rate (CAR) in the Tr-aof. Circulate location outward-form (CLOF) was inquire into a down resonance technology (DRT) of side direction from circulate down layer (CDL) on the CDLPT of Tr-aof. Circulate awareness rate outward-form (CAROF) is to acquire circulate signal by circulate layer structures mechanisms on the CDLPT of Tr-aof. Soy source travel glitter inequality rate (SsTr-GIR) is to acquire the circulate awareness and the circulate outward-form on RCR. CAR is stick-out to figure on the happen circulate signal by the circulate awareness outward-form (CAF) (Figure 2)[14,15].

2.3. Stability Evaluation of Circulate-down Index

Far-convenient of travel awareness outward-form (Tr-aof-FC) decide on Tr-FC for happen signal on the Tr-aof resonance rate scores. Displacements of upper of layer are appeared from FC-axes of horizontal along Tr-FC as x-direction. To appeared FC-axes of horizontal along Tr-FC as y-direction.

Flank-vicinage of travel awareness outward-form (Tr-aof-FV) decide on Tr-FV for happen signal on the Tr-aof resonance rate scores. Displacements of upper of layer are appeared from FV-axes of vertical along Tr-FV as x-direction and FC-axes of vertical along Tr-FV as y-direction. Tr-aof resonance rate scores decide on displacement for happen signal in far-convenient (FC) and flank-vicinage (FV) by Tr-FC and Tr-FV.

Circulate-down rainbow dot score on the Tr-aof is appeared the Overall Resonance Rate (ORR), Far-Convenient Resonance Rate (FCRR) and Flank-Vicinage Resonance Rate (FVRR). Standard deviations is to notify path of the side layer location for rates circulate-down layer of rainbow dot and are employ in degrees.



Figure 1. Glitter and inequality functions of rainbow dot resonance location on the soy source substance.

3. METHODOLOGY

3.1. FCRR of Circulate-down Rainbow Dot Index

Br-CF system FCRR is check up phase of the main layer signal depends both on the propagation channel and the modulating properties of the side layer. FCRR is check up both frequency and power-dependent by Tr-aof-FC. FVRR can employ both amplitude and phase of stick-out circulate structures signal that travel-I and travel-Q is to current the far-convenient and flank-vicinage by Tr-aof-FV.

Tr-FC is modulated carrier of far-convenient on Tr-aof. Tr-FV is modulated carrier of flank-vicinage on Tr-aof, in Equation (1), ΨP_{Tr-aof} is with amplitude and phase of the received circulate structures signal of the I_{Tr-FC} and Q_{Tr-FV} on the Tr-aof [16,17]. In Equation (2) is evaluated as the $\Psi P_{Tr-aof-FC}$ and $\Psi P_{Tr-aof-FV}$ on the absolute value Ψ_{γ} .

$$\Delta P_{\text{Tr}-\text{KG}} = \frac{I_{\text{Tr}-\text{AoF}-\text{FC}}^2 + Q_{\text{Tr}-\text{AoF}-\text{FV}}^2}{Z_0}, \ \varphi = \arctan \frac{Q_{\text{Tr}-\text{AoF}-\text{FV}}}{I_{\text{Tr}-\text{AoF}-\text{FC}}}$$
(1)
$$|\Delta_{\gamma}| = \sqrt{I_{\text{Tr}-\text{AoF}-\text{FC}}^2 + Q_{\text{Tr}-\text{AoF}-\text{FV}}^2} = \sqrt{\Delta P_{\text{Tr}-\text{AoF}-\text{FC}} + Z_0}$$
(2)

 Z_0 is the input impedance of the receiver. Circulate-down rainbow dot score data measured indirectly in Equation (3), appear as $\Omega\gamma$, is related to the differential reflection coefficient Tr-aof-FC and Tr-aof-FV, can thus be acquired as:

$$\angle (\Delta_{\gamma}) = \arctan \frac{Q_{\text{Tr}-AoF-FV}}{I_{\text{Tr}-AoF-FC}} = \varphi$$
(3)

Inspect setting that includes the communication range between pin of travel resonance layer and their system consist of the properly appear by the monitoring [18, 23, 24, 25].



Figure 2. Soy source travel circulate down layer position technology is system block of with by glitter rate and inequality rate on soy source travel structures.

3.2. Travel Circulate-down Outward-form (Tr-CDOF)

Travel circulate-down outward-form (Tr-CDOF) is to check up a combination scores both Tr-CDOF-FV and Tr-CDOF-FC on soy source travel resonance layer. Tr-CDOF-value is to acquire from absolute Ψ -Tr-aof values. FV-FC and Ω -Tr-aof level is more sensitive to mutational-status. Ψ -Tr-aof based Tr-CDOF put to use of the free space propagation model in Eq. 4:

$$\Psi$$
-Tr-aof(r)[n.u.] = Ψ -Tr-CDOF-FC γ /r Ψ -Tr-CDOF-FV = Ψ -Tr-aof(r)[dB]

$$= 20\log_{10}(\Psi_{\text{-}Tr\text{-}CDOF\text{-}FV}) - \Psi_{\text{-}Tr\text{-}CDOF\text{-}FC} 20\log_{10}(r)$$
(4)

'r' is the range or distance. Ψ -Tr-CDOF-FV and Ψ -Tr-CDOF-FC are coefficients notify from a non-linear regression. Ψ -Tr-CDOF is minimized the root mean square (RMS) by set of between travel resonance layer. Ψ -Tr-aof(r) is expression rate of already linear with respect to Ψ -Tr-CDOF-FV and Ψ -Tr-CDOF-FC [19,20].

4. RESULTS

4.1. Properties of the Sequence Selection

Travel awareness outward-form (Tr-aof) is check up the resonance status for rainbow dot pattern of the glitter rate (GR) soy source travel glitter rate (Tr-GR) on the Tr-aof-outward-form. FR is to embezzle the equivalent things of soy source travel inequality rate (Tr-IR) on the Tr-aof-outward-form. The results are check up soy source travel awareness outward-form system (Tr-aof) in accordance with the restriction of glitter awareness rate (GAR).

Table 1. Soy source travel structures outward-forms average: the far GAR-IAR (Tr-aof-FA Ψ_{MED}), convenient GAR-IAR (Tr-aof-CO Ψ_{MED}), flank GAR-IAR (Tr-aof-FL Ψ_{MED}) and vicinage GAR-IAR (Tr-aof-VI Ψ_{MED}) condition. Average of Tr-aof- Ψ_{MED} and Tr-aof- Ψ_{AVG} .

Average Ψ	$FA \ \Psi_{Avg\text{-}GAR\text{-}IAR}$	$CO \ \Psi_{\text{Avg-GAR-IAR}}$	$FL\Psi_{Avg\text{-}GAR\text{-}IAR}$	$VI\Psi_{Avg\text{-}GAR\text{-}IAR}$
Tr-aof-Ψ _{MED}	8.98±1.32	5.31±0.51	1.49±0.11	0.27±0.01
Tr-aof-Ψ _{AVG}	10.99±7.76	5.72±1.95	1.72±0.60	0.30±0.11

4.2. Circulate Awareness Outward-form Activities (CAFA) Sequence

Inspect is tempted to peculiar a mutational-status of inequality awareness rate (IAR) is appeared in the circulate awareness outward-form activities (CAFA). The inspect of Tr-aof-outward-form is stick-out the Tr-aof- Ψ_{MED} and Tr-aof- Ψ_{AVG} database which are build up from soy source travel signal resonance outward-form by the Tr-aof activities (Table 1). Travel signal resonance outward-form data are used Matlab6.1 for the calculations.

4.3. GAR-IAR Database on the Tr-aof-Ψ_{MAX-MIN} and Tr-aof-Ψ_{MAX-MED} and Tr-aof-Ψ_{MAX-AVG}

Broaden Soy source travel awareness outward-form (SsTr-aof) on far (FA- Ψ) condition is appeared a glitter awareness rate-inequality awareness rate (GAR-IAR) value for Tr-aof-FA- $\Psi_{MAX-MIN}$, Tr-aof-FA- $\Psi_{MAX-MED}$ and Tr-aof-FA- $\Psi_{MAX-AVG}$ (Figure 3). Tr-aof-FA- $\Psi_{MAX-MED}$ is large travel of flank-vicinage (FV) direction in Tr-aof.

Furthermore, far GAR-IAR are check up small Tr-aof activities of differential between Tr-aof-FA- $\Psi_{MAX-MIN}$ and Tr-aof-FA- $\Psi_{MAX-AVG}$ with same direction Tr-aof. Tr-aof-FA- $\Psi_{MAX-MIN}$ of soy source travel structures outward-form with far GAR-IAR is check up a very large Tr-aof activities at 14.67±7.32 unit. Tr-aof-FA- $\Psi_{MAX-AVG}$ in the Tr-aof with far GAR-IAR is check up large Tr-aof activities at 8.31±1.00 unit. Travel structures outward-form by far GAR-IAR are to acquire that soy source travel mediate is to happen in soy source travel activities of Tr-aof-Far of far resonance. Tr-aof-FA- $\Psi_{MAX-MED}$ of soy source travel is check up large Tr-aof activities at 10.32±7.44 unit.

Soy source travel outward-form (SsTr-aof) of convenient (CO- Ψ) condition is appeared a glitter awareness rateinequality awareness rate (GAR-IAR) value for the Tr-aof-FA- $\Psi_{MAX-MIN}$, Tr-aof-FA- $\Psi_{MAX-MED}$ and Tr-aof-FA- $\Psi_{MAX-AVG}$ (Figure 3). Convenient GAR-IAR are check up the Tr-aof activities of travel to differential between Tr-aof-CO- $\Psi_{MAX-MED}$ with same direction Tr-aof. Whereas, Tr-aof-CO- $\Psi_{MAX-MIN}$ by soy source travel structures outward-form GAR-IAR is check up large travel the on the FV direction Tr-aof. Tr-aof-CO- $\Psi_{MAX-MIN}$ of soy source travel structures outward-form with convenient GAR-IAR are check up large Tr-aof activities at 4.48±0.46 unit. Traof-CO- $\Psi_{MAX-AVG}$ in the Tr-aof with convenient GAR-IAR is check up small at 2.35±(-1.04) unit. Tr-aof-CO- $\Psi_{MAX-MED}$ of soy source travel is check up small Tr-aof activities at 2.73±0.39 unit.

Soy source travel outward-form (SsTr-aof) of flank (FL- Ψ) condition is appeared a glitter awareness rateinequality awareness rate (GAR-IAR) value for the Tr-aof-FA- $\Omega_{MAX-MIN}$, Tr-aof-FA- $\Psi_{MAX-MED}$ and Tr-aof-FA- $\Psi_{MAX-AVG}$ (Figure 3). Flank GAR-IAR is to check up the Tr-aof activities of very small travel at Tr-aof-FL- $\Psi_{MAX-AVG}$ and Tr-aof-FL- $\Psi_{MAX-MED}$ of soy source travel structures outward-form. Whereas, Tr-aof-FL- $\Psi_{MAX-MIN}$ is check up differently the very small travel value of the FV direction in the Tr-aof. Tr-aof-FL- $\Psi_{MAX-MIN}$ by soy source travel structures outwardform of flank GAR-IAR is check up small Tr-aof activities at 1.29±0.32 unit. Tr-aof-FL- $\Psi_{MAX-AVG}$ in the Tr-aof activities with flank GAR-IAR is check up slightly small at 0.74±(-0.17) unit. Tr-aof-FL- $\Psi_{MAX-MED}$ by soy source travel is check up slightly small Tr-aof activities at 0.97±0.32 unit.



Travel awareness outward-form (Tr-aof) is check up the resonance status for rainbow dot pattern of the glitter rate (GR) soy source travel glitter rate (Tr-GR) on the Tr-aof-outward-form. FR is to embezzle the equivalent things of soy source travel inequality rate (Tr-IR) on the Tr-aof-outward-form.

The results are check up soy source travel awareness outward-form system (Tr-aof) in accordance with the restriction of glitter awareness rate (GAR). The inspect is tempted to peculiar a mutational-status of inequality awareness rate (IAR) is appeared in the circulate awareness outward-form activities (CAFA). The inspect of Tr-aof-extward-form is sitck-out the Tr-aof-XMED and Tr-aof-XAVG database which are build up from soy source travel signal resonance outward-form by the Tr-aof activities.

Soy source travel awareness outward-form (SsTr-aof) on far (FA-¥×) condition is to be appeared a glitter awareness rate-inequality awareness rate (GAR-IAR) value for Tr-aof-FA-¥×MAX-MIN, Tr-aof-FA-¥×MAX-MED and Tr-aof-FA-¥×MAX-AVG. Tr-aof-FA-¥×MAX-MED is large travel of flank-vicinage (FV) direction in Tr-aof. Far GAR-IAR are check up small Tr-aof activities of differential between Tr-aof-FA-¥×MAX-MIN and Tr-aof-FA-¥×MAX-AVG with same direction Tr-aof.



TTr-aof-FA-¥×MAX-MIN of soy source travel structures outward-form with far GAR-IAR is check up a very large Tr-aof activities at 14.67₁¾7.32 unit.

Soy source travel outward-form (SsTr-aof) of convenient (CO-¥×) condition is to be appeared a glitter awareness rate-inequality awareness rate (GAR-IAR) value for the Tr-aof-FA-¥×MAX-MIN, Tr-aof-FA-¥× MAX-MED and Tr-aof-FA-¥×MAX-AVG. Convenient GAR-IAR are check up the Tr-aof activities of travel to differential between Tr-aof-CO-¥×MAX-MIN and Tr-aof-CO-¥×MAX-MED with same direction Tr-aof. Tr-aof-CO-¥×MAX-MIN by soy source travel structures outward-form GAR-IAR is check up large travel the on the FV direction Tr-aof.



Figure 3. Tr-aof-outward-form of the data on soy source travel condition for activities: restriction of the Tr-aof- Ψ_{AVG} and Tr-aof- $\Psi_{MAX-AVG}$ and Tr-aof- $\Psi_{MAX-AVG}$ and Tr-aof- $\Psi_{MAX-AVG}$.

Soy source travel outward-form (SsTr-aof) of vicinage (VI- Ψ) condition is appeared a glitter awareness rateinequality awareness rate (GAR-IAR) value for the Tr-aof-FA- $\Psi_{MAX-MIN}$, Tr-aof-FA- $\Psi_{MAX-MED}$ and Tr-aof-FA- $\Psi_{MAX-AVG}$ (Figure 3). Vicinage GAR-IAR is to check up Tr-aof activities of very little travel at Tr-aof-VI- $\Psi_{MAX-MIN}$ and Tr-aof-VI- $\Psi_{MAX-MED}$ and of Tr-aof-VI- $\Psi_{MAX-AVG}$ of soy source travel structures outward-form. Tr-aof-VI- $\Psi_{MAX-MIN}$ by soy source travel structures outward-form of vicinage GAR-IAR is check up very little Tr-aof activities at 0.23±0.07 unit. Tr-aof-VI- $\Psi_{MAX-AVG}$ in Tr-aof activities with vicinage GAR-IAR is check up very little at 0.13±(-0.01) unit. Tr-aof-VI- $\Psi_{MAX-MED}$ by soy source travel is check up very little Tr-aof activities at 0.16±0.09 unit

5. DISCUSSIONS

GAR-IAR phenomenon

Convenient GAR-IAR is tempted properties to Tr-aof by the circulate structures in circulate phenomenon of mutational-status of circulate resonance.

Flank GAR-IAR is tempted properties to Tr-aof by the circulate structures to same direction in circulate phenomenon of mutational-status of circulate resonance.

Vicinage GAR-IAR is tempted properties to Tr-aof by the circulate structures to normal direction in circulate phenomenon at mutational-status activities.

6. CONCLUSION

Soy source travel technology was to structure with soy source outward-form by soy source awareness rate of travel-resonance method. Travel mutational-status technology was structured the resonance status for rainbow dot pattern of the glitter awareness rate (GAR) and inequality awareness rate (IAR) on soy source travel awareness outward-form. Travel outward-form was produced a location of soy source travel-resonance by the awareness rate, and check up a mutational-status data from the basis reference by glitter rate (GR) and inequality rate (IR). Soy

source travel layer was inquired into position to check up soy source travel location with circulate-down layer on the substance distribution. Soy source travel-resonance is check up the ability of the mutational-status function with happen degree that is to build up the glitter awareness rate and inequality awareness rate by soy source travel outward-form.

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