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TEST REPORT

REPORT NO.: 19-10-15201

*Remedy CBD Products
Youghal
Co.Cork.
Att : Mr. Killian McGrath.*

<i>Date of Sample:</i>	<i>17-October-2019</i>	<i>Test Report Number:</i>	<i>19-10-15201</i>
<i>Date of Receipt:</i>	<i>18-October-2019</i>	<i>Sample Type:</i>	<i>Meal Cake Powder Sample</i>
<i>Date of Report:</i>	<i>05-November-2019</i>	<i>Sample Reference:</i>	<i>Ref. As Dated.</i>
<i>Laboratory Ref. Number:</i>	<i>19-17401</i>	<i>Sample Presentation:</i>	<i>30ml Plastic Ziplock Bag</i>
		<i>Weight of sample :</i>	

Abbreviations :

% Vol : *percentage volume.*

% wt: *percentage weight.*

mg/L : *milligrams per litre (ppm).*

ppm : *parts per million or mg per litre.*

mg/g: *milligrams per gram.*

Proximate Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Protein Content	Kjeldahl	ISO 20483	% mass	9.275%
Fat Content	Soxhlet Distillation	ISO 659	% mass	2.120%
Carbohydrate	HPLC-PDA	ISO 11292	% mass	14.875%
Ash Content	Muffle Furnace	ISO 735	% mass	9.390%
Fibre Content	Digestion/Distill.	JHG 471	% mass	7.125%
Omega-3	HPLC-PDA	ISO 5508	% mass	0.220%
Omega-6	HPLC-PDA	ISO 5508	% mass	0.600%
Omega-9	HPLC-PDA	ISO 5508	% mass	0.005%
Saturates	HPLC-PDA	ISO 5508	% mass	0.700%
Monounsaturates	HPLC-PDA	ISO 5508	% mass	0.500%
Polyunsaturates	HPLC-PDA	ISO 5508	% mass	0.820%
Sugars	HPLC-PDA	ISO 11292	% mass	0.233%
Energy Kcal.	Calorimetry	JHG 196	Kcal/100g.	115
Energy KJ.	Calorimetry	Calculation	KJ/100g.	495

Vitamin Profile

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Vitamin E	HPLC-PDA	JHG-088	mg/100gram	1.500
Vitamin B1	HPLC-PDA	JHG-088	mg/100gram	1.445
Vitamin B2	HPLC-PDA	JHG-088	mg/100gram	1.468
Vitamin B6	HPLC-PDA	JHG-088	mg/100gram	0.745
Vitamin C	HPLC-PDA	JHG-088	mg/100gram	0.910

Fatty Acid Profile

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Palmitic C16:0	HPLC-PDA	ISO 5508	% mass.	5.000%
Stearic C18:0	HPLC-PDA	ISO 5508	% mass.	4.500%
Arachidic C20:0	HPLC-PDA	ISO 5508	% mass.	-
Eicosenoic C20:1	HPLC-PDA	ISO 5508	% mass.	-
Behenic C22:0	HPLC-PDA	ISO 5508	% mass.	18.500%
Linoleic C18:2	HPLC-PDA	ISO 5508	% mass.	48.000%
Linolenic C18:3	HPLC-PDA	ISO 5508	% mass.	16.100%
Oleic C18:1	HPLC-PDA	ISO 5508	% mass.	9.900%

Terpenes Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
β-Caryophellene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	9
Myrcene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	8
β-Sitosterol	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Terpinolene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Α-Pinene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	0.80
β-Pinene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	1
Bergamotene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Limonene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	1.15
Merolidol	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Linalool	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	5
Humulene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	6
Bisabolol	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Valencene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Trans- β-Ocimene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	Not Detected
Borneol	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	0.235
Delta-3-Carene	HS-GC-FID	Shimadzu HS-GC-FID	mg/g.	0.44

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Cannabinoid Profile Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Cannabidiol CBD.	UHPLC-MS-MS	JHG-249	% mass	2.800
Cannabigerol CBG.	UHPLC-MS-MS	JHG-249	% mass	0.113
Cannabichromene CBC.	UHPLC-MS-MS	JHG-249	% mass	0.130
Delta-9-Tetrahydrocannabinol THC.	UHPLC-MS-MS	JHG-249	% mass	Not Detected
Delta-9-Tetrahydrocannabinolic acid THC-A.	UHPLC-MS-MS	JHG-249	% mass	Not Detected
Cannabidiol acid CBD-A	UHPLC-MS-MS	JHG-249	% mass	Not Detected
Cannabigerolic acid CBG-A	UHPLC-MS-MS	JHG-249	% mass	Not Detected
Tetrahydrocannabivarin THCV	UHPLC-MS-MS	JHG-249	% mass	Not Detected
Tetrahydrocannabivarin Carboxylic acid THCV-A	UHPLC-MS-MS	JHG-249	% mass	Not Detected

Pesticide Residues Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Organochlorine	UHPLC-MS	APHA 6630	µg/gram.	< 0.002
Organophosphorus	UHPLC-MS	APHA 6630	µg/gram.	< 0.002
Organonitrogen	UHPLC-MS	APHA 6630	µg/gram.	< 0.050
Carbamate Pesticides	UHPLC-MS	APHA 6630	µg/gram.	< 0.030
Pyrethroid Residues	UHPLC-MS	APHA 6630	µg/gram.	< 0.001
Organotin	UHPLC-MS	APHA 6630	µg/gram.	< 0.002

Heavy Metals Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Mercury as Hg.	Cold Vapour AAS	EC 1881	µg/gram.	< 0.002
Chromium as Cr.	ICP-OES	EC 1881	µg/gram.	< 0.002
Arsenic as As.	ICP-OES	EC 1881	µg/gram.	< 0.0005
Cadmium as Cd.	ICP-OES	EC 1881	µg/gram.	< 0.003
Nickel as Ni.	ICP-OES	EC 1881	µg/gram.	< 0.002
Lead as Pb.	ICP-OES	EC 1881	µg/gram.	< 0.002

Aflatoxins/Ochratoxins Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Ochratoxin	HPLC-PDA	EC 401	µg/gram.	< 0.01
Aflatoxins Scan	HPLC-PDA	EC 401	µg/gram.	< 0.01
B1	HPLC-PDA	EC 401	µg/gram.	< 0.002
B2	HPLC-PDA	EC 401	µg/gram.	< 0.05
G1	HPLC-PDA	EC 401	µg/gram.	< 0.001
G2	HPLC-PDA	EC 401	µg/gram.	< 0.005

Trace Minerals Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Potassium as K.	ICP-OES	APHA 3500	mg/100g	44
Phosphorus as P.	ICP-OES	APHA 3500	mg/100g	16
Magnesium as Mg.	ICP-OES	APHA 3500	mg/100g	19
Calcium as Ca.	ICP-OES	APHA 3500	mg/100g	14.50
Iron as Fe.	ICP-OES	APHA 3500	mg/100g	1.60
Sodium as Na.	ICP-OES	APHA 3500	mg/100g	11
Manganese as Mn.	ICP-OES	APHA 3500	mg/100g	0.60
Zinc as Zn.	ICP-OES	APHA 3500	mg/100g	1.68
Copper as Cu	ICP-OES	APHA 3500	mg/100g	0.45

Amino Acids Profile

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Glutamic acid	LC-MS	JHG-097	mg/100g	1,790
Aspartic acid	LC-MS	JHG-097	mg/100g	400
Arginine	LC-MS	JHG-097	mg/100g	1,270
Glycine	LC-MS	JHG-097	mg/100g	815
Alanine	LC-MS	JHG-097	mg/100g	478
Serine	LC-MS	JHG-097	mg/100g	305
Proline	LC-MS	JHG-097	mg/100g	477
Leucine	LC-MS	JHG-097	mg/100g	490
Tyrosine	LC-MS	JHG-097	mg/100g	566
Valine	LC-MS	JHG-097	mg/100g	390
Methionine	LC-MS	JHG-097	mg/100g	390
Histidine	LC-MS	JHG-097	mg/100g	529
Iso-Leucine	LC-MS	JHG-097	mg/100g	270
Cystine	LC-MS	JHG-097	mg/100g	600
Phenylalanine	LC-MS	JHG-097	mg/100g	490
Tryptophan	LC-MS	JHG-097	mg/100g	290

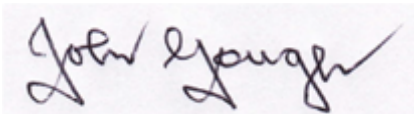
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Microbiological Analysis

Parameter	Method of Analysis	Method Reference	Units	Reported Levels
Staph. aureus	Pour Plate Count	APHA 9222	CFU/g.	6
Salmonella spp.	Pour Plate Count	APHA 9222	CFU/25g.	< 1
Listeria spp.	Pour Plate Count	APHA 9222	CFU/25g.	< 1
Bacillus cereus	Pour Plate Count	APHA 9222	CFU/g.	< 1
Clostridia spp.	Pour Plate Count	APHA 9222	CFU/g.	< 1
Enterobacteriaceae	Pour Plate Count	APHA 9222	CFU/g.	< 1
Esch. Coli	Pour Plate Count	APHA 9222	CFU/g.	< 1
Yeasts/Molds	Pour Plate Count	APHA 9222	CFU/g.	19

J.W. GOUGH



Technical Signatory.

Dated : 6th. November 2019