



UNITED REPUBLIC OF TANZANIA
MINISTRY OF AGRICULTURE
TANZANIA FERTILIZER REGULATORY AUTHORITY



FERTILIZER REGISTER BOOK FOR REGISTERED FERTILIZERS AND
FERTILIZERS SUPPLEMENTS

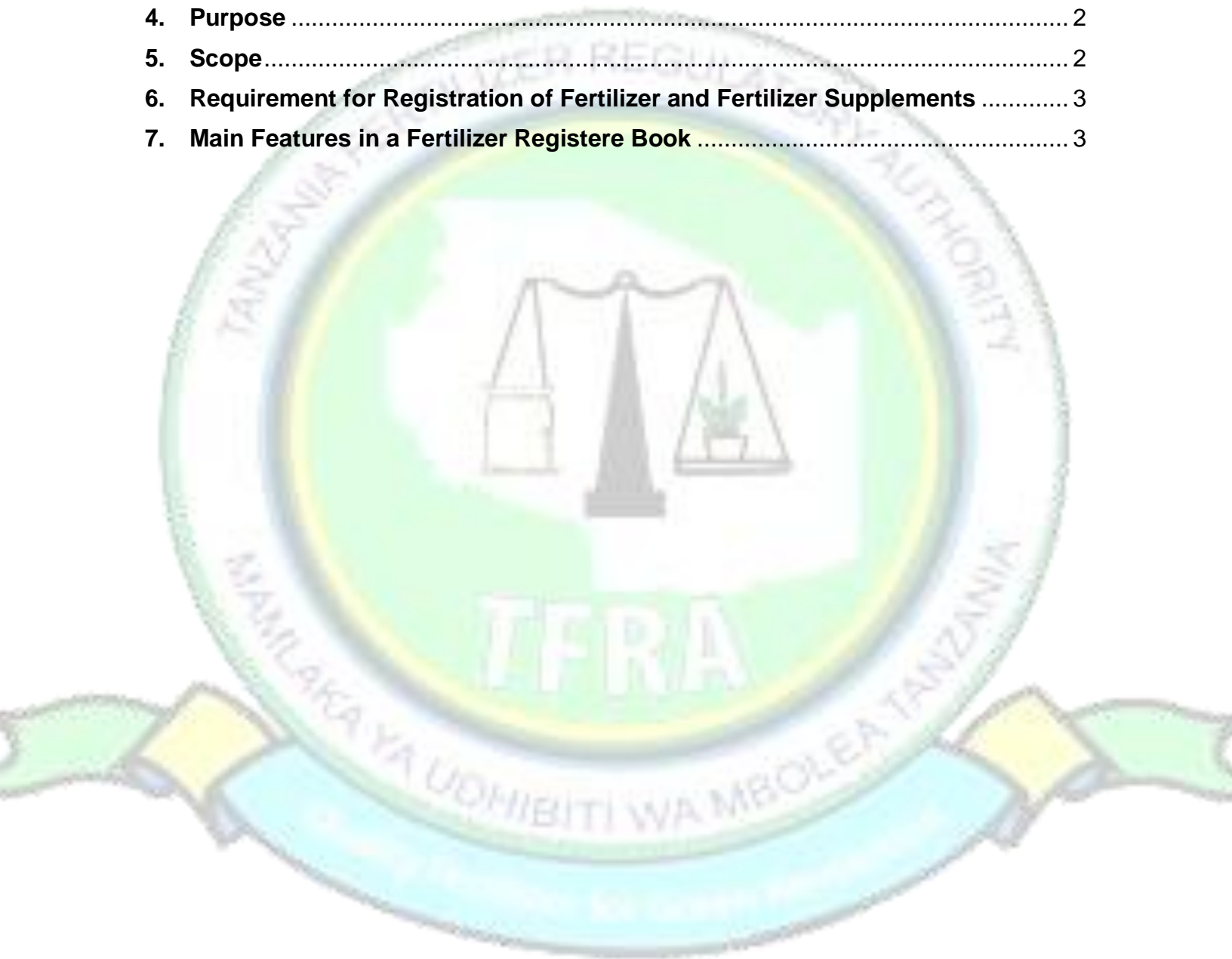
ISSUED BY THE EXECUTIVE DIRECTOR OF TANZANIA FERTILIZER
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Preamble

Tanzania Fertilizer Regulatory Authority (TFRA) has prepared Fertilizer Register Book (FRB) which shows the list of registered fertilizers in the United Republic of Tanzania. This list shows fertilizer and fertilizer supplements (FFS) which have been registered as per Fertilizer Act No.9 of 2009 and its Fertilizer Regulations of 2011. This FRB shows the trade name of fertilizer, nutrient content, registration number, year of registration and common use. This FRB intend to provide a technical assistance and assurance on the quality of fertilizer to all stakeholders involved in fertilizer industry which include among others administrators, fertilizer dealers, fertilizer inspectors, extension officers and farmers.

This FRB will provide assurance to the users that the fertilizer or fertilizer supplements listed have been tested or validated and registered by TFRA and on the other hand, FRB will be used as the enforcement tool for compliance.

Thus, FRB intends to provide information to stakeholders that the listed FFS in this book have been registered by TFRA after adhering to all the required standard and procedures as stated in the Act and Regulation. The use of this FRB is expected to contributed toward increase fertilizer investors, agricultural productivity, livelihood and hence ensure national food security.


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1. Definition of abbreviations



Al:	Aluminium
B:	Boron
Ca:	Calcium
CaO:	Calcium Oxide
Co:	Cobalt
Cu:	Copper
DAP:	Di ammonium Phosphate
Fe:	Iron
FFS:	Fertilizer and Fertilizer Supplements
FRB:	Fertilizer Register Book
K:	Potassium
Mg:	Magnesium
MgO:	Magnesium Oxide
Mn:	Manganese
Mo:	Molybdenum
MOP:	Muriel of Potash or Potassium Chloride
N:	Nitrogen
OM:	Organic Matter
P:	Phosphorus
PPM:	Parts per million
S:	Sulphur
TE:	Trace Element
TFRA:	Tanzania Fertilizer Regulatory Authority
Zn:	Zinc

2. Definition of terms



"Director"	means	The Executive Director of the Tanzania Fertilizer Regulatory Authority appointed under section 7
"Fertilizer supplement"	means	any substance or mixture of substances, other than a fertilizer, that is manufactured, sold or represented for use in the improvement of the physical condition of soils or to aid plant growth or crop yields
"Inspector"	means	a person appointed or designated as an Inspector pursuant to section 33;
"Act"	Means	The Fertilizer Act No. 9 of 2009
"Authority"	means	The power or rights to give orders, make decisions and enforce obedience.
"Regulations"	Means	Fertilizer regulations, 2011
"Trade name"	Means	a name by which FFS is known in a trade
"Nutrient Content"	Means	Level of nutrient contained in fertilizer
"Registration Number"	Means	a number given to a registered fertilizer
"Registrant"	Means	a person who register trademark of a fertilizer
"Common Use"	Means	
"Farmers"	Means	a person who involve in agricultural activities
"Efficacy"	Means	Performance of the registered fertilizer
"Quality"	Means	a standard fertilizer as measured against its performance
"Extension Officers"	Means	a person who led farmers to use good agricultural practices

3. Introduction

Tanzania Fertilizer Regulatory Authority (TFRA) is the Government Authority made under Section 3 of Fertilizer Act No.9 of 2009, mandated of regulating the manufacturing, exportations, marketing and use of fertilizer and fertilizer supplements in the country. This includes among others registering all fertilizer and fertilizer supplements.

Sections 8 and 9 of the Fertilizer Act No.9 of 2009 set out procedures for registration of FFS. Registration proceeds via assessing the suitability for use for the purpose of evaluating impacts to crops, soils, human health and the environment by carrying out laboratory analysis and efficacy trials. Trials are conducted for new fertilizers which contains new nutrients or microorganisms which had never been registered in Tanzania, for new formulations/blends which contain existing nutrients or already register nutrients prior to its registration it requires only laboratory analysis to test its conformity to the standards field evaluation should be optional.

Procedure for registration of fertilizer and fertilizer supplements are set out in The Fertilizer Regulations of 2011 regulations 3(1)(2)(3) and its amendments on The Fertilizer (amendments) Regulations, 2017 regulation 4. Section 15 of the Fertilizer Act No.9 of 2009 requires Publication and maintenance of register for all registered fertilizers.

4. Purpose

This FRB shows the list of registered FFS in the United Republic of Tanzania. The main purpose is to provide information to fertilizer stakeholders that the fertilizer listed in this FRB have been registered and are in compliances with relevant standards and regulations and on the other hand, FRB will be used as the enforcement tool for compliance.

5. Scope

This FRB comprise the list of all registered FFS which are eligible for use in United Republic of Tanzania and it will be used by all stakeholders includes administrators, decision makers, farmers, investors, researchers, extension officers and fertilizers dealers

6. Requirement for Registration of Fertilizer and Fertilizer Supplements

Requirement for registration of FFS are set out in fertilizer regulation of 2011 regulation 3, which require an applicant to submit to the Director in a form as set out in the First Schedule to the Fertilizer Regulations of 2011 and shall be accompanied by

- i. The information on the suitability of the fertilizer and fertilizer supplements as to its use including technical data sheet and directions;
- ii. A sample of the fertilizer, fertilizer supplements and certificate of analysis, if already issued;
- iii. A written declaration that the fertilizer and fertilizer supplements have or have not been banned or restricted in the country of origin;
- iv. Three copies of the label that is intended to be used for the fertilizer and fertilizer supplements to which the application relates and such other information as is necessary to determine the safety, merit and value of such fertilizer or fertilizer supplements
- v. Such other information or document as may be required by the Director; and
- vi. Where an application is made by an applicant who is not resident in Tanzania, the fertilizer and fertilizer supplements to which the application relates shall not be eligible for registration, unless the application is signed by an agent of the applicant who is permanently resident in Tanzania and to whom any notice or correspondence under the Act may be sent and such agent gives an undertaking to the Director.

7. Main features in a fertilizer register Book

The main features or information in a list of registered fertilizers are

- i. Registration Number
- ii. Nutrient Content
- iii. Common Use

The List of Registered Fertilizer and Fertilizer Supplements in the United Republic of Tanzania as per Fertilizers Act, 2009.

S/NO	REGISTRATION NUMBER	NUTRIENT CONTENT	COMMON USE
1	0001	46%N	Vegetative
2	0002	18%N: 46%P ₂ O ₅	Vegetative, Rooting
3	0003	11-12%N: 48-61%P ₂ O ₅	Vegetative, Rooting
4	0004	26-27%N	Vegetative, Flowering and Fruiting
5	0005	21%N + 24% S	Vegetative, Fruiting, Oil formation, Increase Acid
6	0006	46%P ₂ O ₅	Rooting
7	0007	60%K ₂ O	Flowering
8	0008	25%N: 5%P ₂ O ₅ : 5%K ₂ O	Vegetative, Rooting, flowering, and fruiting
9	0009	17%N: 17%P ₂ O ₅ : 17%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
10	0010	16%N: 16%P ₂ O ₅ : 16%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
11	0011	20%N: 10%P ₂ O ₅ : 10%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
12	0012	10%N: 18%P ₂ O ₅ : 24%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
13	0013	48-53%K ₂ O + 17-18%S	reduce soil pH soil pH, Flowering and fruiting
14	0014	6%N: 24%P ₂ O ₅ : 20%K ₂ O + 1.5%Mg, 8%S, 0.25%B, Zn	Rooting, Vegetative, Flowering and Fruiting, water and mineral transportation, Stalk elongation and plant vein

15	0015	5%N: 20%P ₂ O ₅ : 24%K ₂ O + 1%Mg, 10%S, 0.25%B, Zn	Rooting, Vegetative, Flowering and Fruiting, reduce soil pH soil pH, stalk elongation and plant vein, water and mineral transportation
16	0021	1.5%Zn, 0.5%Mn	stalk elongation and plant vein, fungal disease resistance
17	0022	9%N: 18%P ₂ O ₅ : 6%K ₂ O + 25%CaO, 2%MgO, 5%S,0.1%B,0.5%Zn	Rooting, Vegetative, Flowering and Fruiting, soil pH regulator, stalk elongation and plant vein, water and mineral transportation
18	0023	11%N +15%MgO	Vegetative, rise soil pH
19	0024	23%N: 10%P ₂ O ₅ : 5%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
20	0025	0.00002728% Cacl ₂ , 0.00002728% MgSO ₄ , 0.000798% Sulphate Castor Oil, 0.00596% Sodium Metasilicate, 1% Lignite Extract	Vegetative, Flowering and Fruiting, soil pH regulation
21	0026	23%N: 21%P ₂ O ₅ : 0%K ₂ O + 4%S	Rooting, Vegetative, Flowering and Fruiting, reduce soil pH soil pH
22	0027	22%N: 6%P ₂ O ₅ : 12%K ₂ O + 2%CaO, 3%S, 1%MgO, 0.2%B, 0.2%Zn	Rooting, Vegetative, Flowering and Fruiting, soil pH regulator, water and mineral transportation, stalk elongation and plant vein,
23	0028	15.5%N + 26.5%CaO	Vegetative, increase soil pH
24	0030	17%N: 17%P ₂ O ₅ : 17%K ₂ O	Rooting, Vegetative and Flowering, fruiting
25	0031	15%N: 9%P ₂ O ₅ : 20%K ₂ O + TE	Rooting, Vegetative, Flowering and Fruiting
26	0032	8%N: 14%P ₂ O ₅ : 19%K ₂ O	Rooting, Vegetative and Flowering and fruiting
27	0033	8%N: 14%P ₂ O ₅ : 19%K ₂ O	Rooting, Vegetative and Flowering and fruiting
28	0034	32%N: 10%P ₂ O ₅ : 8K ₂ O + TE	Rooting, Vegetative and Flowering and fruiting
29	0035	15%N: 15%P ₂ O ₅ : 15%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
30	0036	52%P ₂ O ₅ : 34%K ₂ O	Rooting and Flowering and fruiting

31	0038	50%K ₂ O + 3%H ₂ SO ₄	Flowering and Fruiting, reduce soil pH soil pH
32	0039	15% MgO + 98% Mg (NO ₃) ₂	Vegetative
33	0043	5.5%N: 0% P ₂ O ₅ : 1%K ₂ O + 0.05%B, 0.15%Zn, 0.5%Fe, 0.05%Cu, 0.3%Mn,4.7% Amino Acids, 22%OM	vegetative, Rooting, flowering and Fruiting, water and mineral transportation, stalk elongation and plant vein, fungal disease resistance, plant respiration, cell wall strengthening, soil drainage and aeration
34	0044	12%N: 10% P ₂ O ₅ : 8%K ₂ O + TE	Rooting, Vegetative and Flowering and fruiting
35	0045	61.5%P ₂ O ₅ + 12.1% NH ₄	Rooting and Vegetative
36	0050	0.3%Mg,11%S, 21.5%Zn, 0.004%Cu	Vegetative, reduce soil pH soil ph, stalk elongation and plant vein, cell wall strengthening
37	0053	18%N: 20%P ₂ O ₅ : 21%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
38	0054	0%N: 50%P ₂ O ₅ : 30%K ₂ O	Rooting, flowering and fruiting
39	0055	14%N: 0% P ₂ O ₅ : 0.2%K ₂ O + 13%CaO, 2.5%Mg + TE	Rooting, Vegetative, Flowering and Fruiting, Raise soil pH,
40	0056	CaCO ₃	Soil conditioner (Reduce Acid)
41	0057	CaSO ₄ .2H ₂ O	Soil conditioner (Increase Acid)
42	0058	14%N: 11%P ₂ O ₅ : 33%K ₂ O	Rooting, Vegetative, Flowering and fruiting
43	0059	27%N: 10%P ₂ O ₅ : 16%K ₂ O	Rooting +Vegetative Flowering + Fruiting
44	0060	16%MgO + 12.5% S	Vegetative and Fruiting, reduce soil pH soil pH
45	0061	15.5% N + 18.5% Ca	Vegetative and Fruiting
46	0062	13%N: 46% K ₂ O	Vegetative and Flowering
47	0063	13%N: 44%K ₂ O	Vegetative, Flowering and Fruiting

48	0064	23%P ₂ O ₅ : 42%K ₂ O + 0.1%B, 0.5%Zn, FV	Rooting, Flowering and Fruiting, stalk elongation and plant vein, water and mineral transportation
49	0065	43%P ₂ O ₅ : 28%K ₂ O + 2%MgO, 0.5%B, 0.2%Mn	Rooting and Vegetative, flowering and fruiting, water and mineral transportation, Fungal disease resistance
50	0066	15%N: 15%P ₂ O ₅ : 15%K ₂ O	Rooting, Vegetative and Flowering and fruiting
51	0067	19%N: 19%P ₂ O ₅ : 19%K ₂ O + 3%MgO + Me	Rooting, Vegetative, flowering and fruiting, rise soil pH
52	0068	46%P ₂ O ₅ : 30%K ₂ O + 2%MgO, 0.2%B, FV	Rooting, Vegetative and Fruiting and flowering, water and minerals transportation, rise soil pH
53	0069	11%N: 7%P ₂ O ₅ : 28%K ₂ O + 2%MgO + Me	Rooting, Vegetative and Fruiting, rise soil pH
54	0070	12%N: 8%P ₂ O ₅ : 23%K ₂ O + 2%MgO + Me	Rooting. Vegetative and Fruiting, Rise soil pH
55	0071	16%N: 8%P ₂ O ₅ : 16%K ₂ O + 8%MgO + Me	Rooting, Vegetative and Fruiting and flowering, rise soil pH
56	0072	20%N: 9%P ₂ O ₅ : 20%K ₂ O + TE	Rooting, Vegetative and Fruiting and flowering
57	0073	19%N: 19%P ₂ O ₅ : 19%K ₂ O + MgO + TE	Rooting, Vegetative, Fruiting and flowering Rise soil pH
58	0074	18%N: 24%P ₂ O ₅ : 18%K ₂ O + TE	Rooting, Vegetative, flowering and Fruiting
59	0076	6% Fe	Plant respiration
60	0078	10%N: 20%P ₂ O ₅ + 25%CaO, 5%S, 0.5%Zn	Rooting, vegetative, pH regulation and stalk elongation and plant vein
61	0079	15.4%N + 25.6%CaO, 0.3% B	Vegetative, Fruiting, water and minerals transportation
62	0080	40%N + 5.5%S	Vegetative and Fruiting, reduce soil pH soil pH and oil Formation
63	0081	14%N: 14%P ₂ O ₅ : 20%K ₂ O + MgO, 0.1% B	Rooting, Vegetative, Flowering and Fruiting, rise soil pH and water and minerals transportation
64	0082	15%N: 9%P ₂ O ₅ : 20%K ₂ O + 3.8%S, 1.8%Mg, 0.02%B, 0.02%Mn, 0.02%Zn	Rooting, Vegetative and Flowering and fruiting, reduce soil pH

65	0083	24%N + 10.7%CaO, 6%S	vegetative, soil pH regulator, Fruiting
66	0084	20%N: 10%P ₂ O ₅ : 10%K ₂ O + 4Mg	Rooting, Vegetative and Flowering and fruiting
67	0085	21%N: 21%P ₂ O ₅ : 21%K ₂ O	Rooting, Vegetative and Flowering and fruiting,
68	0087	13% N, 44% K ₂ O, 0.5% CaO, 0.5% MgO	Vegetative, flowering and fruiting, rise soil pH
69	0088	99% MgSO ₄	Vegetative and Fruiting
70	0089	13%N: 2% P ₂ O ₅ :44% K ₂ O	Rooting, Vegetative and Flowering
71	0090	19%N: 19%P ₂ O ₅ : 19%K ₂ O + 2%MgO + B + Me	Vegetative, Rooting, Flowering and Fruiting, Rise soil pH, water and mineral transportation
72	0091	4-6% N: 19-21% P ₂ O ₅	Rooting and Vegetative
73	0092	12%N: 10%P ₂ O ₅ : 8%K ₂ O	Vegetative, Flowering and Fruiting, Rooting
74	0095	10%N: 10%P ₂ O ₅ : 24%K ₂ O	Rooting, Vegetative, Flowering and Fruiting
75	0096	15% N: 36% P ₂ O ₅ : 0% K ₂ O	Vegetative and Rooting
76	0097	31%N: 0%P ₂ O ₅ : 7K ₂ O + 2% MgO + TE + FV	Vegetative, Rooting, Flowering and Fruiting, Rise soil pH
77	0098	6%N: 18%P ₂ O ₅ : 37% K ₂ O +2% MgO + TE + FV	Vegetative, Rooting, rise soil pH, Flowering and Fruiting
78	0099	5%N + 0.1%B, 0.75%Zn, 0.1%Fe, 0.1%Cu 0.5%Mn, 0.02%Mo, 0.01%Co, 40%OM, 10% Amino Acids	Vegetative, water and minerals transportation, stalk elongation and plant vein, plant respiration, cell wall strengthening, fungal disease resistance, Nitrogen balance, soil drainage and aeration,
79	00100	7%N + 14.4% Amino Acids	Vegetative and Flowering
80	00101	3% N: 10% P ₂ O ₅ + 1%B, 0.5%Mo, 3% Amino Acids	Vegetative, Rooting, Nitrogen balance,
81	0102	22%N: 6%P ₂ O ₅ : 12%K ₂ O	Rooting, Vegetative, Flowering and fruiting

82	0103	4.5% N: 1% P ₂ O ₅ : 1%K ₂ O + 25% Fluvic Acids, 25%Humic Extract, 45%OM	Vegetative, Rooting, Flowering and Fruiting, Water retention
83	0104	4%N: 3%P ₂ O ₅ : 3%K ₂ O	Vegetative, Flowering and Fruiting, Rooting
84	0105	10%N: 18%P ₂ O ₅ : 24%K ₂ O + 7S	Vegetative, Flowering and Fruiting, Rooting, Reduce soil pH
85	0106	5%N: 5%P ₂ O ₅ : 40%K ₂ O + 0.25%MgO + TE	Vegetative, Rooting, Flowering and fruiting, Rise soil pH
86	0107	22%N: 21%P ₂ O ₅ : 17%K ₂ O	Vegetative, Flowering and Fruiting, Rooting
87	0108	24%N: 24%P ₂ O ₅ : 18%K ₂ O + TE	Rooting and Vegetative, Flowering and Fruiting
88	0110	4.8%N + 4.9%Mg + 4.9%B + 9.9%Zn	Vegetative, Flowering and Fruiting, stalk elongation and plant vein, Rise soil pH
89	0111	0%N: 30%P ₂ O ₅ : 5%K ₂ O + 2.5%Mg + 3.1%Zn	Vegetative, Flowering and Fruiting, Rise soil pH, Rooting, stalk elongation and plant vein
90	0112	Biofix-Legume Inoculant	Rooting, Nodule formation, N-fixation
91	0113	7%N + 49% Humic acid	Vegetative, improve water retention
92	0114	14%N: 28%P ₂ O ₅ : 18%K ₂ O + TE	Rooting, Vegetative, Flowering and fruiting
93	0115	19%N: 19%P ₂ O ₅ : 19%K ₂ O + TE	Vegetative, Rooting, Flowering and Fruiting
94	0116	12%N: 10%P ₂ O ₅ : 8%K ₂ O + TE	Vegetative, Rooting, Flowering and Fruiting
95	0117	1.5%N: 1.5%P ₂ O ₅ : 3.5%K ₂ O + 25% Organic Matter	Rooting, Vegetative, Flowering and fruiting, soil drainage and aeration
100	0118	Rhizobia Bacteria	Rooting, Nodule formation, N-fixation
101	0119	10%N: 5%P ₂ O ₅ : 40%K ₂ O + TE	Vegetative, Flowering and Fruiting, Rooting
102	0120	25%N: 5%P ₂ O ₅ : 5%K ₂ O + 5%S	Vegetative, Flowering and Fruiting, Rooting, Reduce soil pH
103	0121	2.1%N: 3.6%K ₂ O	Vegetative, Flowering
104	0122	16%N: 10%P ₂ O ₅ : 8%K ₂ O	Vegetative, Rooting, Flowering
105	0123	16%N:	Vegetative

106	0124	40%N + 7%S	Vegetative, Fruiting, Oil formation and reduce soil pH
107	0125	15% B	water and minerals transportation
108	0126	24%N + 15%S	Vegetative and Fruiting and reduce soil pH
109	0127	4%N: 3%P ₂ O ₅ : 2%K ₂ O	Vegetative, Rooting, Flowering
110	0128	51%K ₂ O + 18%S + 1%Cl	Flowering and fruiting, Oil formation, reduce soil pH, disease resistance and tolerance
111	0129	70%Zn	stalk elongation and plant vein
112	0130	Bacillus, Rhizobium	Rooting and Vegetative, Nodule formation N-fixation
113	0131	15%B	water and mineral transportation
114	0132	6%N: 18%P ₂ O ₅ : 37%K ₂ O + 2%MgO, ME, FV	Vegetative, Flowering and Fruiting, rooting, rise soil pH
115	0133	17%N: 21%P ₂ O ₅ : 11%K ₂ O	Vegetative, Rooting, and Flowering
116	0134	13.44% N: 7.55% P ₂ O ₅ : 4.84%K ₂ O	Vegetative, Rooting, Flowering and Fruiting
117	0135	0.6%Mg, 0.2%B, 0.4%Zn, 0.2%Fe, 0.9%Cu,	Rooting, vegetation, plant respiration, stalk elongation and plant vein, Cell wall strengthening, water and minerals transportation
118	0136	97.56% Calcium Carbonate	Soil conditioner (Reduce Acid)
119	0137	13%N: 46%K ₂ O	Vegetative, Flowering and fruiting
120	0138	8%N: 50%P ₂ O ₅ : 8%K ₂ O + 2 %MgO, ME, FV	Vegetative, Rooting, rise soil pH, Flowering and Fruiting
121	0139	31%N: 8%P ₂ O ₅ : 7%K ₂ O + 2 %MgO, B, ME	Vegetative, Rooting, water and minerals transportation, Flowering and Fruiting, rise soil pH
122	0140	19%N: 19%P ₂ O ₅ : 19%K ₂ O + 2%MgO, ME, FV	Vegetative, Rooting, Flowering and Fruiting, rise soil pH
123	0141	48% CaCO ₃ , 38% MgCO ₃ , 67% ECCE	Soil conditioner

124	0142	20%N: 20%P ₂ O ₅ : 20%K ₂ O	Vegetative, Rooting, Flowering
125	0143	30%N: 10%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
126	0144	10%N: 10%P ₂ O ₅ : 40%K ₂ O	Vegetative, Rooting, Flowering
127	0145	10%N: 52%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
128	0146	24%N: 24%P ₂ O ₅ : 18%K ₂ O	Vegetative, Rooting, Flowering
129	0147	26%N: 8%P ₂ O ₅ : 17%K ₂ O + 2%MgO	Vegetative, Rooting, Flowering and fruiting
130	0148	19%N: 19%P ₂ O ₅ : 19%K ₂ O	Vegetative, Rooting, Flowering
131	0149	0%N: 51.5%P ₂ O ₅ : 34%K ₂ O	Rooting, Flowering and fruiting
132	0150	8%N: 24%P ₂ O ₅ : 16%K ₂ O + 5%S, 0.1%B, 0.5%Zn	Rooting, Vegetative, Flowering and fruiting, water and minerals transportation, stalk elongation and plant vein, reduce soil pH
133	0151	28%P ₂ O ₅ + 36%CaO	Rooting, Fruiting and rise soil pH
134	0152	28%P ₂ O ₅ + 36%CaO	Rooting, fruiting and rise soil pH
135	0153	0%N: 0.7%P ₂ O ₅ : 0.5%K ₂ O + 5%Ca, 0.5% Mg	Rooting, rise soil pH, Flowering and Fruiting
136	0154	32% N: 10%P ₂ O ₅ : 8%K ₂ O	Vegetative, Rooting, Flowering
137	0155	14%K ₂ O + 17%CaO, 6%MgO, 47.8%SO ₃	Flowering and Fruiting, soil pH regulator
138	0156	14%K ₂ O + 17%CaO, 6%MgO, 47.8%SO ₃	Flowering and Fruiting, soil pH regulator
139	0157	20%N: 10%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
140	0158	20%N: 10%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
141	0159	17%N: 17%P ₂ O ₅ : 17%K ₂ O	Vegetative, Rooting, Flowering
142	0160	49.3% Protein + 3.1 Soluble Carbohydrate	Vegetative

143	0161	2.45%N: 0.76%P ₂ O ₅ : 2.66%K ₂ O + 13%CaO, 1.01%B	Vegetative, Rooting, rise soil pH, water and minerals transportation, Flowering and Fruiting
144	0162	12%N: 10%P ₂ O ₅ : 8%K ₂ O + TE	Vegetative Rooting, Flowering and fruiting
145	0163	2%N: 10%P ₂ O ₅ : 01%K ₂ O + TE	Vegetative Rooting, Flowering and fruiting
146	0164	16%Mg + 13%S	Fruiting, Oil formation, Reduce Soil pH
147	0165	15%N: 10%P ₂ O ₅ : 35%K ₂ O + TE	Vegetative, Rooting, Flowering and fruiting
148	0166	20%N: 5%P ₂ O ₅ : 18%K ₂ O + Zn, B	Vegetative, Rooting, Flowering and fruiting, water and minerals transportation, stalk elongation and plant vein
149	0167	18%N: 6%P ₂ O ₅ : 12%K ₂ O	Vegetative, Rooting, Flowering
150	0168	11%N: 8%P ₂ O ₅ : 6%K ₂ O + TE	Vegetative, Rooting, Flowering
151	0169	19%N: 19%P ₂ O ₅ : 19%K ₂ O + TE	Vegetative, Rooting, Flowering
152	0170	46 % N + 5% Zn	Vegetation, stalk elongation and plant vein
153	0171	9%N: 5%P ₂ O ₅ : 8%K ₂ O	Vegetative, Rooting, Flowering
154	0172	33% N	Vegetative
155	0173	14%N: 09%P ₂ O ₅ : 04%K ₂ O	Vegetative, Rooting, Flowering
156	0174	7.3% Titanic Sulphate, 1.2% Citric acid, 0.3% Tartaric acid, 4.2% Ammonia water, 1% Acticide	Vegetative, strengthening plant stress tolerance
157	0175	20%N: 20%P ₂ O ₅ : 20%K ₂ O	Vegetative, Rooting, Flowering
158	0176	15%N: 10%P ₂ O ₅ : 34%K ₂ O + TE	Vegetative, Rooting, Flowering
159	0177	23%N: 10%P ₂ O ₅ : 05%K ₂ O + 2%MgO +3%S + 0.3%Zn	Vegetative, Rooting, Flowering and fruiting, stalk elongation and plant vein, soil pH regulator
160	0178	20%N: 20%P ₂ O ₅ : 20%K ₂ O + TE	Vegetative, Rooting, Flowering

161	0179	28%N: 14%P ₂ O ₅ : 14%K ₂ O + TE	Vegetative, Rooting, Flowering
161	0180	14%N: 23%P ₂ O ₅ : 14%K ₂ O + 5%S +1% B ₂ O ₃	Vegetative, Rooting, Flowering and fruiting, water and minerals transportation, reduce soil pH
162	0181	2.2% Aromatic Nitrogen	Vegetative
163	0182	14%N: 25%P ₂ O ₅ : 13%K ₂ O + TE	Vegetative, Rooting, Flowering
164	0183	13%N: 52%P ₂ O ₅ : 05%K ₂ O + TE	Vegetative, Rooting, Flowering
165	0184	24%N: 18%P ₂ O ₅ : 18%K ₂ O + TE	Vegetative, Rooting, Flowering
166	0185	31%N: 11%P ₂ O ₅ : 11%K ₂ O + TE	Vegetative, Rooting, Flowering
167	0186	15%N: 12%P ₂ O ₅ : 31%K ₂ O	Vegetative, Rooting, Flowering
168	0187	19%N: 38%P ₂ O ₅ : 0%K ₂ O + 7%S	Vegetative, Rooting, Flowering and fruiting, reduce soil pH
169	0188	13%N: 10%P ₂ O ₅ : 13%K ₂ O	Vegetative, Rooting, Flowering
170	0189	8%N: 32% P ₂ O ₅ : 4%K ₂ O	Vegetative, Rooting, Flowering
171	0190	0%N: 50%P ₂ O ₅ : 35%K ₂ O	Vegetative, Rooting, Flowering
172	0174	28%N: 14% P ₂ O ₅ : 14%K ₂ O	Vegetative, Rooting, Flowering
173	0192	14%N: 11%P ₂ O ₅ : 33%K ₂ O + TE	Vegetative, Rooting, Flowering
174	0193	27%N: 10%P ₂ O ₅ : 16%K ₂ O +TE	Vegetative, Rooting, Flowering
175	0194	2%K ₂ O + Organic Nutrients	Flowering,
176	0195	1%N: 0%P ₂ O ₅ :2%K ₂ O + Organic Nutrients	Vegetative, Rooting, Flowering and fruiting, soil drainage and aeration
177	0196	24%N: 6%P ₂ O ₅ : 12%K ₂ O	Vegetative, Rooting, Flowering and fruiting
178	0197	11.6%K ₂ O + 12.1%CaO, 3.6%Mg, 19.2% S	Rooting, Vegetative, Flowering and Fruiting, soil pH regulator.

179	0198	16%N: 32%P ₂ O ₅ : 16%K ₂ O	Vegetative, Rooting, Flowering
180	0199	16%N: 8%P ₂ O ₅ : 25%K ₂ O	Vegetative, Rooting, Flowering
181	0200	24%N: 24%P ₂ O ₅ : 18%K ₂ O + TE	Vegetative, Rooting, Flowering
182	0201	Bacterial and Algae Extract	Stimulate growth process
183	0202	15%N: 22.5%CaO	Vegetative, Fruiting and rise soil pH
184	0203	Bacterial and Algae Extract	Stimulate growth process
185	0204	Extract of See Weed and Blue Green Algae	Stimulate growth process and produce blue green pigment in plant
186	0205	Extract of See Weed and Blue Green Algae	Stimulate growth process and produce blue green pigment in plant
187	0206	30% Sea Weed Extract, 4g/L Cu + Zn + Mo + B, 12%N: 20%P ₂ O ₅ : 20%K ₂ O	Rooting, Vegetative, Flowering and Fruiting, water and minerals transportation, Nitrogen, balance, stalk elongation and plant vein, cell wall strengthening, plant stress tolerance
188	0207	8%N: 8%P ₂ O ₅ : 6%K ₂ O	Vegetative, Rooting, Flowering and fruiting
189	0208	5%N: 10%P ₂ O ₅ : 3%K ₂ O + 1%Zn 1%Fe, 1.5%Mn,	Vegetative, Rooting, stalk elongation and plant vein, plant respiration, fungal disease resistance, Flowering and fruiting
190	0209	24%N: 24%P ₂ O ₅ : 18%K ₂ O + 1.5%Mg	Vegetative, Rooting, Flowering and fruiting
191	0210	20%N: 20%P ₂ O ₅ : 20%K ₂ O	Vegetative, Rooting, Flowering
192	0211	5%N: 50%P ₂ O ₅ : 30%K ₂ O	Vegetative, Rooting, Flowering
193	0212	20%N: 20%P ₂ O ₅ : 20%K ₂ O +TE	Vegetative, Rooting, Flowering and fruiting
194	0213	12%N + 5%Mg, 15% CaO	Vegetative, fruiting and rise soil pH
195	0214	14%N: 25%P ₂ O ₅ : 13%K ₂ O + 3.2%Mg, 12.5%S, 1.8% Zn	Vegetative, Rooting, stalk elongation and plant vein, soil pH regulator, Flowering and fruiting
196	0215	0%N: 30%P ₂ O ₅ : 40%K ₂ O + TE	Rooting, Flowering and fruiting

197	0216	36%K ₂ O + 25% S	Flowering, Fruiting and Oil formation
198	0217	10%N: 50%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering and fruiting
199	0218	40% N	Vegetative
200	0219	8.5%N + 4%B, 4% Zn, 40%C, 13.5% Amino Acid	vegetative, water and minerals transportation, stalk elongation and plant vein, plant growth and respiration
201	0220	18%N: 44%P ₂ O ₅	Rooting and Vegetative
202	0221	15%N: 20%P ₂ O ₅ : 50%K ₂ O	Vegetative, Rooting, Flowering
203	0222	10%N: 50%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
204	0223	38%CaO + 0.6%Mg	Fruiting, vegetative, and rise soil pH
204	0224	25%CaO + 9.5%Mg	Fruiting, vegetative, and rise soil pH
205	0225	0.1%Mg, 0.4%S, 0.3%B, 0.3%Zn, 0.4%Fe, 0.1%Mn	Vegetative, water and minerals transportation, stalk elongation and plant vein, plant respiration, fungal disease resistance,
206	0226	5.6%N: 19.5%P ₂ O ₅ : 5%K ₂ O + TE	Rooting, vegetative, flowering
207	0227	4.9%Zn + 17% Organic Matter	stalk elongation and plant vein, soil drainage and aeration
208	0228	12%N: 24%P ₂ O ₅ : 12%K ₂ O + 2%MgO, 5%S, 0.007%Zn 0.2%Fe,	Rooting, Vegetative, Flowering and Fruiting, plant respiration, stalk elongation and plant vein, soil pH regulator
209	0229	Streptomyces sp, Lactobacillus sp, Rhizobium sp	Rooting+ Nodule formation, N-fixation
210	0230	Streptomyces sp, Lactobacillus sp, Rhizobium sp	Rooting+ Nodule formation, N-fixation
211	0231	19%N: 19%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
212	0232	8.5% S	Fruiting and Oil formation

213	0233	1.1%N: 0.13%P ₂ O ₅ : 3.9%K ₂ O +0.58%CaO, 0.48%Mg, 0.38%S, 29.45% Organic Matter	Rooting, Vegetative, soil drainage and aeration, soil pH regulator Flowering and Fruiting
214	0235	51.5%P ₂ O ₅ : 34%K ₂ O	Rooting, flowering and fruiting
215	0236	0.5%B, 0.51%Zn, 0.31%(6-BA)	water and mineral transportation, stalk elongation and plant vein
216	0237	0.62%IBA	Root formation
217	0238	0.4% Cytokinin	Root formation
218	0239	0.005%CaO, 0.007%Mg, 1.62%Zn 22%Fe, 0.001% Cu, 0.24%Mn,	Vegetative, Fruiting, plant respiration, fungal disease resistance, cell wall strengthening
219	0240	18%K ₂ O + 0.2% B	Flowering and fruiting, water and minerals transportation
220	0241	10%CaO, 0.2%B, 6% Amino acid	Vegetative, Fruiting, water and minerals transportation, rise soil pH
221	0242	3%N + 9% B, 30% OM	Vegetative, water and minerals transportation, soil drainage and aeration
222	0243	1.5%Zn, 0.5%Mn	stalk elongation and plant vein, fungal disease resistance
223	0244	6.5%Cu	Cell wall strengthening
	0245	1%Zn, 0.5%B, 2%Fe, 0.5%Cu, 1%Mn	stalk elongation and plant vein, plant respiration, water and mineral transportation, fungal disease resistance,
224	0246	8%N: 9%P ₂ O ₅ : 13%K ₂ O	Vegetative, Rooting, Flowering
225	0247	3%N: 2%K ₂ O	Vegetative, Flowering and fruiting
226	0248	30%P ₂ O ₅	Rooting,
227	0249	30% Humic acid + 10% Ascorbic acid	Rooting, Lower Soil pH and water retention
228	0250	1.4%N: 0.3%P ₂ O ₅ : 0.7%K ₂ O +2.5%OM	Rooting, Vegetative, Flowering and fruiting, soil drainage and aeration
229	0251	2.5%Cu	cell wall strengthening

230	0252	2.35%N: 4.44%P ₂ O ₅ : 1.75%K ₂ O + TE	Vegetative, Rooting, Flowering, Vegetative, Flowering and Fruiting
231	0255	30%N: 10%P ₂ O ₅ : 10%K ₂ O + TE	Vegetative, Rooting, Flowering
232	0256	15%N: 5%P ₂ O ₅ : 35%K ₂ O + TE	Vegetative, Rooting, Flowering
233	0257	28%N: 8%P ₂ O ₅ : 9%K ₂ O + TE	Vegetative, Rooting, Flowering
234	0258	12%N: 10%P ₂ O ₅ : 10%K ₂ O + TE	Vegetative, Rooting, Flowering
235	0259	5%N: 7.5% P ₂ O ₅ : 5%K ₂ O + 5%Mg 5%S, 5%B, 5%Zn, 0.1%Fe, 0.1%Cu, 0.1%Mn, 0.1%Mo	Rooting, Vegetative, Flowering and Fruiting, water and minerals transportation, Nitrogen balance, stalk elongation and plant vein, cell wall strengthening, plant respiration, reduce soil pH
236	0260	0%N: 29.5%P ₂ O ₅ : 5%K ₂ O+ 2.7%MgO + 3.1%Zn	Rooting, Vegetative, Flowering and Fruiting, Rise the soil pH, stalk elongation and plant vein
237	0261	Conc. Zinc micronutrient	stalk elongation and plant vein
238	0262	10.9%B	water transport and mineral transportation
239	0263	33% Cu	cell wall strengthening
240	0264	18%N: 6%P ₂ O ₅ : 9%K ₂ O	Rooting, Vegetative, Flowering
241	0265	28%N: 8%P ₂ O ₅ : 9%K ₂ O + 4%B	Rooting, Vegetative, Flowering and fruiting, water and mineral transportation
242	0266	11%N: 7%P ₂ O ₅ : 7%K ₂ O	Rooting, Vegetative, Flowering
243	0267	25%N	Vegetative,
244	0268	5%N: 25%P ₂ O ₅	Rooting, Vegetative
245	0269	2%K ₂ O + Organic nutrients	flowering and fruiting, soil drainage and aeration
246	0270	3%N: 15%P ₂ O ₅ +10%Zn	Rooting and Vegetative, stalk elongation and plant vein
247	0271	5%N: 0% P ₂ O ₅ : 5%K ₂ O +25%OM + TE	Vegetative, Rooting, flowering and fruiting, soil drainage and aeration

248	0272	0.5%B, 4%Zn,4%Fe, 0.5%Cu 2%Mn	water and mineral transportation, stalk elongation and plant vein, plant respiration, cell wall strengthening, Fungal disease resistance
249	0273	30%K ₂ O	Flowering and fruiting
250	0274	1.6%N: 0.5%P ₂ O ₅ : 0.5%K ₂ O + 60%OM	Rooting, Vegetative, Flowering and fruiting, soil drainage and aeration
251	0275	11%N: 22%P ₂ O ₅ : 21%K ₂ O +4%S, 1%B +0.1%zn	Rooting, Vegetative, Flowering and Fruiting, reduce soil pH, water and minerals transportation, stalk elongation and plant vein
252	0276	10%N: 18%P ₂ O ₅ : 24%K ₂ O + 7%CaO, 0.5%MgO, 7%S,0.1%B	Rooting, Vegetative, Flowering and Fruiting, pH regulation, water and minerals transportation
253	0277	27%N: 10%P ₂ O ₅ : 0%K ₂ O + 15%CaO	Rooting, Vegetative, Flowering and Fruiting
254	0278	8%N: 17%P ₂ O ₅ : 2%K ₂ O	Vegetative, Rooting, Flowering
255	0279	08%N: 05%P ₂ O ₅ : 30K ₂ O	Vegetative, Rooting, Flowering
256	0280	31%N: 10%P ₂ O ₅ : 8%K ₂ O + TE	Vegetative, Rooting, Flowering
257	0281	Brady rhizobium, Japonicum	Rooting, Nodule formation, N-fixation
258	0282	20%N: 20%P ₂ O ₅ : 20%K ₂ O + TE	Rooting, Vegetative, Flowering
259	0283	15%N: 30%P ₂ O ₅ :15%K ₂ O + 1% MgO + TE	Rooting, Vegetative, Flowering and Fruiting, rise soil pH
260	0284	30%N: 10%P ₂ O ₅ : 10%K ₂ O + 0.7%MgO + TE	Rooting, Vegetative, Flowering and Fruiting, rise soil pH
261	0285	10%N: 10%P ₂ O ₅ : 40%K ₂ O + 1% MgO + TE	Rooting, Vegetative, Flowering and Fruiting, rise soil pH
262	0286	12%N: 45%P ₂ O ₅ + 5% S + 1% Zn	Rooting, Vegetative, reduce the soil pH, stalk elongation and plant vein
263	0287	0.05%Fulvic Acid	Lower Soil pH, Root growth, Fix Phosphate
264	0288	10%N + 17%CaO, 14%Mg,0.1%B	Vegetative, Rise soil pH, fruiting
265	0289	30% Humic acid + 10% Ascorbic acid	Lower Soil pH, water retention

266	0290	30% Zn + 30% Cu	stalk elongation and plant vein, cell wall elongation
267	0291	7%N: 7% P ₂ O ₅ : 7% K ₂ O	Rooting, Vegetative, flowering and fruiting
268	0292	19.87%N: 11.74%P ₂ O ₅ : 11.11%K ₂ O + 0.001%Zn, 0.04%Fe + 0.009%Cu, 0.026%Mn	Rooting, Vegetative, flowering and fruiting, stalk elongation and plant vein, plant respiration, cell wall strengthening, fungal disease resistance
269	0293	3.67%N: 2.25%P ₂ O ₅ : 0.7%K ₂ O + 0.3%Ca, 0.07%Mg	Rooting, Vegetative, flowering and fruiting, rise soil pH
270	0294	2.93%N + 6.99%Mn	Vegetative, Fungal disease resistance
271	0295	29%P ₂ O ₅ + 21.6%K ₂ O	Rooting, Flowering
272	0296	3%N + 29%P ₂ O ₅	Vegetative, Rooting
273	0297	10%B	water and mineral transportation
274	0298	0.02%K ₂ O + 0.01%CaO + 0.06%Na	Flowering and Fruiting, pH regulator
275	0299	0.06%N: 0.01%P ₂ O ₅ : 0.15%K ₂ O + 0.03%CaO	Rooting, Vegetative, Flowering and fruiting
276	0300	2.5%N: 0.3%P ₂ O ₅ : 0.12%K ₂ O + TE	Vegetative, Rooting, Flowering
277	0301	0.15%Zn, 0.5%Fe, 0.05%Cu	stalk elongation and plant vein, plant respiration, cell wall strengthening
278	0302	18%N: 20%P ₂ O ₅ : 21%K ₂ O + TE	Rooting, Vegetative, Flowering and fruiting
279	0303	12%N: 12%P ₂ O ₅ : 12%K ₂ O + TE	Rooting, Vegetative, Flowering and fruiting
280	0304	6%Fe	Plant respiration
281	0305	4.1%MgO ,1.12%B, 2.9%Zn 5.4%Fe, 0.67%Cu, 2.83%Mn, 0.048%Mo	Rise soil pH, water and mineral transportation, Plant respiration, cell wall strengthening, fungal disease resistance, nitrogen balance
282	0306	0%N: 45%P ₂ O ₅ : 55%K ₂ O	Rooting, vegetative, Flowering and fruiting

283	0307	2%MgO, 1.5%B, 4%Zn, 4%Fe, 0.5%Cu, 3%Mn, 0.05%Mo	Rise soil pH, water and mineral transportation, Plant respiration, cell wall strengthening, fungal disease resistance, nitrogen balance
284	0308	12%N: 12%P ₂ O ₅ : 44%K ₂ O + 3%MgO + TE	Rooting, Vegetative, Flowering and Fruiting, Rise the soil pH
285	0309	24%N: 24%P ₂ O ₅ : 14%K ₂ O	Rooting, Vegetative, Flowering
286	0310	32%N: 10%P ₂ O ₅ : 20%K ₂ O + 20%S, 2%B 2%Zn, 2.8%Fe, 3.7%Cu, 2.7%Mn, 2%Mo, 2.8%Co	Rooting, Vegetative, Flowering and fruiting, reduce soil pH, water and mineral transportation, stalk elongation and plant vein, Plant respiration, cell wall strengthening, fungal disease resistance, Nitrogen balance,
287	0311	16%N: 10%P ₂ O ₅ : 22%K ₂ O	Rooting, Vegetative, Flowering
288	0312	12.17%K ₂ O + 71.07 % Humic acid	Improve health of Seedling and reduce soil pH plant rooting
289	0313	24%N: 24%P ₂ O ₅ : 18%K ₂ O + 4%Mg, 4%S, TE	Rooting, Vegetative, Flowering and Fruiting, pH regulator
290	0314	12%N: 45%P ₂ O ₅ : 20%K ₂ O + 2%CaO, 4%Mg, TE	Rooting, Vegetative, Flowering and Fruiting, rise soil pH
291	0315	15%N: 10%P ₂ O ₅ : 45%K ₂ O + 4%Mg, 4%S, TE	Rooting, Vegetative, Flowering and Fruiting soil pH regulator
292	0316	12%N +18%CaO, 3%Mg, 1%B, 2% Amin acid	Vegetative, Flowering, rise soil pH
293	0317	19%N: 19%P ₂ O ₅ : 19%K ₂ O + Mg + TE	Vegetative, rooting, Flowering and Fruiting
294	0318	12%N: 6%K ₂ O + 40%SO ₃	Vegetative, flowering and fruiting, Reduce soil pH, Oil formation
295	0319	15%N: 24%P ₂ O ₅ : 12%K ₂ O	Rooting, Vegetative, Flowering
296	0320	20%N: 20%P ₂ O ₅ : 18%K ₂ O + TE	Rooting, Vegetative, Flowering
297	0321	5.65%N: 0.9%P ₂ O ₅ : 4.61%K ₂ O	Rooting, Vegetative, Flowering
298	0322	20%N: 5%P ₂ O ₅ : 35%K ₂ O	Rooting, Vegetative, Flowering

299	0323	23%K ₂ O + 11%MgO	Flowering and fruiting, rise soil pH
300	0324	15%N: 10%P ₂ O ₅ : 45%K ₂ O	Vegetative, Rooting, Flowering
301	0325	31%N: 11%P ₂ O ₅ : 15%K ₂ O	Vegetative, Rooting, Flowering
302	0326	15%N: 10%P ₂ O ₅ : 45%K ₂ O + 4%MgO, 4%S,	Rooting, Vegetative, soil pH regulator, Flowering and fruiting
303	0327	12%N: 12%P ₂ O ₅ : 12%K ₂ O	Rooting, Vegetative, Flowering
304	0328	12%N	Vegetative
305	0329	15%N: 15%P ₂ O ₅ : 15%K ₂ O + TE	Vegetative, Rooting, Flowering
306	0330	19%N: 19%P ₂ O ₅ : 10%K ₂ O	Vegetative, Rooting, Flowering
307	0331	19%N: 19%P ₂ O ₅ : 19%K ₂ O + MgO, TE	Rooting, Vegetative, rise soil pH, Flowering and fruiting
308	0332	2.3% N + 18.6% C/N, 42.8% OC, 38% OM,	Rooting, Vegetative, Flowering and fruiting, soil drainage and aeration
309	0333	2% N: 0.1% P ₂ O ₅ : 4% K ₂ O + 8 g/l Mg, 20 g/l Amino Acid, 200 g/l Organic Matter, 8 g/l Humic Acid, 120 g/l Organic Sugar	Rooting, Vegetative, Flowering and fruiting, Water retention, soil drainage and aeration, plant growth and pant respiration, reduce soil pH
310	0334	1.7% N + 2.1% MgO, 2.07% B, 0.02% Mo, 2.84% H ₂ SO ₃	Vegetative, pH regulator, Flowering, H ₂ O and Mineral Transportation, Nitrogen balance
311	0335	38%N: 5%P ₂ O ₅ : 5%K ₂ O	Vegetative, Rooting, Flowering
312	0336	13%N: 40%P ₂ O ₅ : 13%K ₂ O + TE	Vegetative, Rooting, Flowering
313	0337	8%N: 2%P ₂ O ₅ : 8%K ₂ O	Vegetative, Rooting, Flowering
314	0338	2%N: 11%P ₂ O ₅ : 11%K ₂ O	Vegetative, Rooting, Flowering
315	0339	12%N: 18%P ₂ O ₅ : 12%K ₂ O	Vegetative, Rooting, Flowering
316	0340	12%N: 18%P ₂ O ₅ : 12%K ₂ O	Vegetative, Rooting, Flowering
317	0341	5%N: 5%P ₂ O ₅ : 45%K ₂ O + TE	Vegetative, Rooting, Flowering

318	0342	14.8%N: 8.87%P ₂ O ₅ : 15.86%K ₂ O + 1.93% S	Vegetative, Rooting, Flowering and fruiting, reduce soil pH
319	0343	19%N: 10%P ₂ O ₅ : 8%K ₂ O	Vegetative, Rooting, Flowering
320	0344	15%N: 4.4%P ₂ O ₅ : 1.8%K ₂ O	Vegetative, Rooting, Flowering
321	0345	10%N: 18%P: 24%K +0.5%Mg, 7%S, 0.012%Bo, 3%Xca	Vegetative, Rooting, Flowering, pH regulator, H ₂ O and Mineral Transportation, Fruiting
322	0346	20%N: 20%P: 20%K + 100ppm Zn, 800ppm Fe, 140ppm Cu,150ppm Mn	Rooting, Vegetative and Flowering, H ₂ O and Mineral Transportation, Plant respiration, cell wall strengthening and stalk elongation and plant veins, Resist fungal disease
323	0347	16.2%Zn	stalk elongation and plant vein
324	0348	2.9%N	Vegetative
325	0349	17%N:14%P:34%K +0.03%B, 0.06%Zn,0.01%Fe,0.05%Cu, 0.05%Mn, 0.001%Mo, 0.007%Amino Acid	Vegetative, Rooting, Flowering, H ₂ O and Mineral Transportation
326	0351	19%N: 19%P ₂ O ₅ : 19%K ₂ O	Rooting, Vegetative, Flowering
327	0352	11%Mo	N-balance
328	0353	1.50% 1-Dodecane Sulfonic acid sodium salts	Enhance H ₂ O solubility
329	0354	14%N: 9%P: 5%K +2%Mg	Vegetative, Rooting, Flowering, Increasing Soil pH
330	0355	40%N + 6%S	Vegetative, Fruiting, Oil formation, reduce soil pH Soil pH
331	0356	6.98%N: 3.88%P: 13.96%K	Vegetative, Rooting, Flowering
332	0357	19%N: %P ₂ O ₅ + 6.24%S, 0.12%B	Vegetative, Rooting and Flowering and Fruiting
333	0358	0.55%N:0.04%P,0.02%K + 6.30 Humic acid, 97.80%Organic Matter,48.80% Humic acid on dry matter	Rooting, Vegetative, Flowering and fruiting, Water retention, soil drainage and aeration, plant growth and pant respiration, reduce soil pH
334	0359	33.5%Zn	stalk elongation and plant veins

335	0360	6.5%Ca: 0.05%B: 15%Fulvic acid	Fruiting, H ₂ O and Mineral Transportation, H ₂ O retention
336	0361	15%Na	pH regulator
337	0362	35%N:1%P:1%K	Vegetative, Rooting, Flowering
338	0363	46%N: 0.1%Zn	Vegetative, stalk elongation and plant veins
339	0364	13%N:24%P ₂ O ₅ :12%K ₂ O +3%S: 2%MgO	Vegetative, Rooting, Flowering, pH regulator, stalk elongation and plant veins
340	0365	17%N:29%P ₂ O ₅ : 6%K ₂ O +0.5%S:0.2%Zn	Vegetative, Rooting, Flowering, reduce soil pH Soil pH, stalk elongation and plant veins
341	0366	22%N:6% P:12%K	Vegetative, Rooting, Flowering
342	0367	7%N:7%P:40%K+ 1%MgO	Vegetative, Rooting, Flowering, Increasing Soil pH
343	0368	12%N:12%P:17%K	Vegetative, Rooting and Flowering
344	0369	10%N :25%P	Vegetative, Rooting
345	0370	15.5%N: 26% CaO	Vegetative, Increase Soil pH
346	0371	50%K ₂ O + 17.5%S	Flowering and reduce soil pH Soil pH
347	0372	13%N:46%K	Vegetative and Flowering
348	0373	45%CaO	Fruiting, Increase Soil pH
349	0374	10.2%N +0.2%B:1%Cu:0.02%Mn :4%Zn	Vegetative, H ₂ O and Mineral Transportation, Resist fungal disease, cell wall strengthening, Cell division and stalk elongation and plant veins
350	0375	8%N +1%S: 0.05%Mn: 0.05%Zn:0.10%Fe.	Vegetative, pH regulator, Resist fungal disease, Cell division and plant metabolism
351	0376	12.1%B	H ₂ O and Mineral Transportation and Enzyme production
352	0377	14.5%N	Vegetative
353	0378	2.6%Mn	Resist fungal disease, Cell division and plant metabolism

354	0379	18.5%CaO	Fruiting
355	0380	9.8%N:21%P:36.7%K:1.9%Mn:0.7% Fe:0.7%B:1.1%Zn:1.9%Cu:2.5%Mo	Rooting, Vegetative and Flowering, Resist fungal disease, Respiration, cell wall strengthening, H ₂ O and Mineral Transportation and stalk elongation and plant veins N-balance
356	0381	13%N:24%P ₂ O ₅ :10%K ₂ O	Rooting, Vegetative and Flowering
357	0382	1.1%N: 39.6%P ₂ O ₅ : 0.11%K ₂ O.	Rooting, Vegetative and Flowering
358	0383	15%N: 9%P ₂ O ₅ : 20%K ₂ O + 8.5%S, 0.02%B, 0.06%Zn	Rooting, Vegetative and Flowering, pH regulator, H ₂ O and Mineral Transportation and stalk elongation and plant veins
359	0384	1.38%Zn: 1.37%Fe: 1.67%Mn	stalk elongation and plant veins, Plant respiration and plant cell division
360	0385	3%N:	Vegetative
361	0386	15.2%N:	Vegetative
362	0387	11.2%N: 10.2%P: 11.8%K	Rooting, Vegetative and Flowering
363	0388	14.80%N, 20.40%P ₂ O ₅ , 18.80%K ₂ O, 1.9%S, 1.30%Mg, 0.12%Zn, 0.14%B, 0.7%Fe, 0.14%Mn, 0.023%Cu, 0.02%Mo	Rooting, Vegetative, Flowering, pH regulator, stalk elongation and plant veins and H ₂ O and Mineral Transportation
364	0389	12%N: 46%P ₂ O ₅ + 5%S, 0.5%Zn	Vegetative, Rooting, reduce soil pH soil pH and stalk elongation and plant veins
365	0390	15%N: 3%P ₂ O ₅ : 5%K ₂ O + 0.3%MgO, 20%S	Rooting, Vegetative, Flowering and pH regulator
366	0391	30%N: 0%P: 1%K +2.5%MgO, 18.5%SO ₃	Vegetative, Flowering, pH regulator, Oil formation