

Voluntary Report – Voluntary - Public Distribution

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Report Name: Turkish Ministry of Agriculture and Forestry Reapproves Seven Biotech Events and Approves Three New Enzymes

Country: Turkiye

Post: Ankara

Report Category: Biotechnology and Other New Production Technologies, Biotechnology and Other New Production Technologies Addendum, Biotechnology - Plants and Animals, Cloning

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Report Highlights:

On June 28, 2024, the Turkish government published biosafety decisions reapproving the import of seven genetically engineered (GE) corn events for feed (Bt11, DAS1507, DAS59122, NK603, GA21, MON89034, MON88017) which had expired, and provided new approvals for three enzymes produced from GE-Aspergillus oryzae for industrial purposes.

Turkish Ministry of Agriculture and Forestry Reapproves Seven Genetically Engineered (GE) Events and Approves Three More Enzymes

Under the Turkish Biosafety Law, approvals for biotechnology events automatically expire after 10 years, and a new application must be made to renew the events. Based on this requirement, the Turkish Poultry Meat Producers and Breeders Association (Besd-Bir) submitted new dossiers to the Ministry of Agriculture and Forestry (MinAF) with the request to reapprove seven GE events for feed (Bt11, DAS1507, DAS59122, NK603, GA21, MON89034, MON88017) which had expired. MinAF accepted the application under a simplified procedure and later approved these events through a decision published in the [Official Gazette](#) on June 28, 2024. MinAF also approved three new enzymes (Microbial Collagenase (EC 3.4.24.3), Phospholipase A1 (EC 3.1.1.32), *Protease* /Thermomycolin (EC 3.4.21.65) produced by GE microorganisms for the industrial purposes, at the same time.

With these latest changes, there are still a total of 36 approved GE events for feed in Turkiye. Please see Table 1 below for the current approved events for feed, Table 2 for pending applications for feed, Table 3 for approved products from approved GE *Aspergillus oryzae*, and Table 4 for pending products from pending GE-*Aspergillus oryzae*.

For detailed information on Turkey's biosafety policies, please refer to [the Agricultural Biotechnology Annual Report for 2023](#).

Table 1: Approved Events for Feed

No	Product	Developer	Event	OECD Unique Identifier	Approval Date
1	Corn	Syngenta	MIR604	SYN-IR6Ø4-5	7/16/2015
2	Corn	Monsanto	MON863	MON-ØØ863-5	7/16/2015
3	Corn	Bayer CropScience	T25	ACS-ZMØØ3-2	7/16/2015
4	Corn	Syngenta	Bt11xMIR604	SYN-BTØ11-1x SYN-IR6Ø4-5	11/5/2015
5	Corn	Syngenta	MIR162	SYN-IR162-4	11/5/2015
6	Corn	Syngenta	MIR604xGA21	SYN-IR6Ø4- 5xMON-ØØ21-9	11/5/2015
7	Corn	Monsanto	MON 87460	MON 8746Ø-4	8/2/2017

8	Corn	Monsanto	MON87427	MON-87427-7	1/23/2021
9	Corn	Dow AgroSciences LLC	DAS-40278-9	DAS-40278-9	2/27/2021
10	Corn	DuPont (Pioneer Hi-Bred International Inc.)	4114	DP-004114-3	1/7/2022
11	Corn	Monsanto	MON87411	MON-87411-9	4/27/2022
12	Corn	Syngenta	MZIR098	SYN-00098-3	4/27/2022
13	Corn	Syngenta	5307	SYN-05307-1	10/13/2022
14	Corn	Monsanto	NK603XMON810	MON-00603-6 x MON-00810-6	12/30/2022
15	Corn	Syngenta	Bt11	SYN-BT011-1	6/28/2024
16	Corn	DuPont Pioneer	DAS1507 (TC1507)	DAS- 01507-1	6/28/2024
17	Corn	Dow AgroSciences LLC	DAS59122	DAS-59122-7	6/28/2024
18	Corn	Monsanto	NK603	MON-00603-6	6/28/2024
19	Corn	Syngenta	GA21	MON-00021-9	6/28/2024
20	Corn	Monsanto	MON89034	MON-89034-3	6/28/2024
21	Corn	Monsanto	MON88017	MON-88017-3	6/28/2024
22	Soybean	Bayer CropScience	FG 72	MST-FG072-2	1/23/2021

23	Soybean	DuPont	DP305423	DP-305423-1	1/23/2021
24	Soybean	Monsanto	MON87701	MON-87701-2	7/16/2015
25	Soybean	DuPont (Pioneer Hi-Bred International Inc.)	DP356043	DP-356043-5	11/5/2015
26	Soybean	Bayer CropScience	A5547-127	ACS-GM006-4	11/5/2015
27	Soybean	Monsanto	MON 87708	MON-87708-9	8/2/2017
28	Soybean	BASF	CV127	BPS-CV127-9	8/2/2017
29	Soybean	Monsanto	MON87705	MON-87705-6	8/2/2017
30	Soybean	Dow AgroSciences LLC	DAS-44406-6	DAS-44406-6	2/27/2021
31	Soybean	Monsanto	MON89788	MON-89788-1	2/27/2021
32	Soybean	Monsanto	MON40-3-2	MON-04032-6	2/27/2021
33	Soybean	Bayer CropScience	A2704-12	ACS-GM005-3	2/27/2021
34	Soybean	BASF	SYHT0H2	SYN-000H2-5	1/7/2022
35	Soybean	Monsanto	MON87751	MON-87751-7	4/27/2022
36	Soybean	Dow AgroSciences LLC	DAS81419	DAS-81419-2	4/27/2022

Table 2: Pending Applications for Feed

No	Product	Developer	Event	OECD Unique Identifier	Application Date	Status
1	Soybean	Monsanto	MON 87769	MON-87769-7	4/30/2015	<i>Pending</i>
2	Canola	Monsanto	GT73 (RT73)	MON-ØØØ73-7	5/11/2015	<i>Pending</i>
3	Canola	Monsanto	MON88302	MON-883Ø2-9	5/11/2015	<i>Pending</i>
4	Canola	Bayer CropScience	MS8 RF3 MS8xRF3	ACS-BNØØ5-8, ACS-BNØØ3-6, ACS-BNØØ5-8 X ACS- BNØØ3-6	5/11/2015	<i>Pending</i>
5	Canola	Bayer CropScience	HCN28 (T45)	ACS-BNØØ8-2	5/11/2015	<i>Pending</i>
6	Soybean	Dow AgroScience s LLC	DAS-68416-4	DAS68416-4	7/13/2021	<i>Pending</i>
7	Corn	Monsanto	MON 87403	MON874Ø3-1	6/27/2022	<i>Pending</i>
8	Corn	Syngenta	MZHGOJG	SYN-ØØØJG-2	6/27/2022	<i>Pending</i>
9	Soybean	BASF	GMB151	BCS-GM151-6	6/27/2022	<i>Pending</i>
10	Cotton	Bayer CropScience	GHB614	BCS-GHØØ2-5	3/25/2024	<i>Pending</i>
11	Cotton	Monsanto		MON-15985-7	3/25/2024	<i>Pending</i>

			MON15985			
12	Cotton	BASF	T304-40	BCS-GHØØ4-7	3/25/2024	<i>Pending</i>
13	Cotton	Monsanto	MON531	MON-ØØ531-6	5/17/20224	<i>Pending</i>

Table 3: Approved products from approved GE *Aspergillus oryzae*

No	Microorganism	Developer	Unique Identifier Code	Product	Approval Date
1	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-101	Enzyme - Alpha-amylase (α -amylase)	5/6/2020
2	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-102	Enzyme - Glucoamylase	5/6/2020
3	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-103	Enzyme - Hemicellulase	5/6/2020
4	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-105	Enzyme Protease/Mucorpepsin EC 3.4.23.23	1/7/2022
5	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-104	Enzyme - Phytase	4/27/2022
6	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-106	Enzyme - Lipase/Triacylglycerol Lipase (EC 3.1.1.3)	10/13/2022
7	<i>Aspergillus oryzae</i>	LIVZYM AS	LIVZ-107	Enzyme - Glucose Oxidase (EC 1.1.3.4)	10/13/2022

8	<i>Aspergillus oryzae</i>	LIVYZM AS	LIVZ-108	Mixture of Endo-1,4-beta-glucanase (E.C.3.2.1.4) and Endo-1,4-beta-xylanase (EC 3.2.1.8)	10/13/2022
9	<i>Aspergillus oryzae</i>	BIOWASTE	BT-101	Inactivated microbial biomass	10/13/2022
10	<i>Aspergillus oryzae</i>	LIVYZM AS	LIVZ-109	Microbial Collagenase (EC 3.4.24.3)	6/28/2024
11	<i>Aspergillus oryzae</i>	LIVYZM AS	LIVZ-110	Phospholipase A1 (EC 3.1.1.32)	6/28/2024
12	<i>Aspergillus oryzae</i>	LIVYZM AS	LIVZ-111	<i>Protease</i> /Thermomycolin (EC 3.4.21.65)	6/28/2024

Table 4: Pending products from pending GE-*Aspergillus oryzae*

No	Microorganism	Developer	Product (Enzyme)	Application Date	Status
1	<i>Aspergillus oryzae</i>	LIVZYM AS	Chymosin (EC 3.4.23.4)	5/5/2023	<i>Pending</i>
2	<i>Aspergillus oryzae</i>	LIVZYM AS	Asparaginase (EC 3.5.1.1)	5/5/2023	<i>Pending</i>

Attachments:

No Attachments.