

List of Biofertilizers, Biopesticides and Biostimulants developed by the institutes of Indian Council of Agricultural Research (ICAR)

1. Biofertilizers

Sr. No.	Institutes Name	Product	Category	Commercialized
1.	ICAR - IARI, New Delhi	<i>Azotobacter</i> Technology - Carrier Based	Biofertilizer	Yes
2.		<i>Azotobacter</i> Technology - Liquid Formulation	Biofertilizer	Yes
3.		PUSA Biophos (PSB Technology - carrier based)	Biofertilizer	Yes
4.		PUSA Biophos (PSB - Liquid Formulation)	Biofertilizer	Yes
5.		PUSA Biopotash - Liquid Formulation	Biofertilizer	Yes
6.		PUSA Bio Zinc - Liquid Formulation	Biofertilizer	Yes
7.		PUSA Sampoorn - Liquid Formulation	Biofertilizer	Yes
8.		PUSA - VAM Technology	Biofertilizer	Yes
9.		BGA (PUSA Algal biofertilizer)	Biofertilizer	Yes
10.		Pusa Compost/ Decomposer Technology	Biofertilizer	Yes
11.	ICAR - NBAIM, Mau, U. P	Bio NPK liquid formulation	Biofertilizer	Yes
12.	ICAR - NRRI, Cuttack	NRRI - EndoN	Biofertilizer	Yes
13.		NRRI - EndoNPK	Biofertilizer	Yes
14.		NRRI-RhizoN	Biofertilizer	Yes
15.		TechNRRI Decomper	Biofertilizer	Yes
16.		Bio-fertilizer consortium (BC) for nutrient management in organic rice-vegetables cropping system in Sikkim	Biofertilizer	Yes
17.		Methanotroph formulation for mitigation of methane emission from rice	Biofertilizer	Yes
18.	ICAR - CISH, Lucknow	CISH - Decomposer Technology - Decomposter	Biofertilizer	Yes

19.	ICAR - IIPR, Kanpur	<i>Mesorhizobium</i> sp. Strain. RFC119	Biofertilizer/ Biostimulant	Yes
20.		<i>Rhizobium</i> sp. Strain LR2959	Biofertilizer/ Biostimulant	Yes
21.		<i>Rhizobium</i> sp. Strain IIPR-PR315	Biofertilizer/ Biostimulant	Yes
22.		<i>Rhizobium</i> sp. Strain IIPR-MR127	Biofertilizer/ Biostimulant	Yes
23.		Microbial Consortium-IIPR-II	Biofertilizer/ Biostimulant	Yes
24.	ICAR - Indian Institute of Spices Research, Kozhikode	<i>B. amyloliquefaciens</i> , <i>Acinetobacter bauhmanii</i> , <i>Bacillus megaterium</i> (Talc formulation)	Biofertilizer	Yes
25.		<i>Pseudomonas putida</i> and <i>Micobacterium paraoxidans</i> (Seed coating formulation for seed spices)	Biofertilizer	Yes
26.	ICAR - CSSRI, Karnal	Halo - Azo	Biofertilizer	Yes
27.		Halo - PSB	Biofertilizer	Yes
28.		Halo - Zinc	Biofertilizer	Yes
29.		Halo - MIX	Biofertilizer	Yes
30.		Halo - CRD	Biofertilizer	Yes
31.		Compost Enricher Block	Biofertilizer	Yes
32.	ICAR - IIHR, Bengaluru	Arka Microbial Consortium (NPK Biofertilizer Consortium available in solid and liquid formulations)	Biofertilizer	Yes
33.		Arka Fermented Cocopeat (Substate)	Biofertilizer	Yes
34.		Arka Decomposer (Starter Culture)	Biofertilizer	Yes
35.		ArkaActinoplus	Biofertilizer	Yes
36.	ICAR - NSRI, Indore	MycoFarm (consortia of <i>Rhizophagus irregularis</i> (<i>Glomus intraradices</i>) <i>Funnelformis mosseae</i> , and <i>Glomus</i> sp. produced through substrate-based pot cultures	Biofertilizer	Yes
37.	ICAR - ISRI, Lucknow	<i>Ikshu PSB</i>	Biofertilizer	Yes
38.		<i>Ikshu Aceto</i>	Biofertilizer	Yes

39.	ICAR - CPRI, Shimla	Biofertilizer-cum-Biofungicide/Biobactericide Composition B5	Biofertilizer/Biop esticide	Yes
40.	ICAR - NRC Banana, Trichy	Kaveri Microbial Consortia (KMC)	Biofertilizer	Yes
41.	ICAR - IISS, Bhopal	<i>Ekcel decomposer: Trichoderma asperellum</i> IISS-F1 (NAIMCC-F-04082), <i>Aspergillus niger</i> IISS-F2, <i>Rhizopus oryzae</i> isolate IISS-F3, <i>Aspergillus terreus</i> IISS-F5	Biofertilizer	Yes
42.	ICAR - CPCRI, Kasaragod	Kera Probio	Biofertilizer	Yes
43.		Cocoa Probio	Biofertilizer	Yes
44.		KerAM	Biofertilizer	Yes
45.		Kera Probio +	Biofertilizer	Yes
46.		Cocoa Probio +	Biofertilizer	Yes
47.	ICAR - NBAIM, Mau, U. P	Bio Phos (<i>Kluyvera cryocrescens</i>)	Biofertilizer	No
48.		Bio Zn Liquid formulation	Biofertilizer	No
49.		Biogrow	Biofertilizer	No
50.		Bio Potash liquid formulation	Biofertilizer	No
51.		Bio - Bacter liquid formulation	Biofertilizer	No
52.		RhizoNBAIM liquid formulation	Biofertilizer	No
53.		Bio Phos (Plus) (<i>Paenibacillus tylopili</i>)	Biofertilizer	No
54.		Bio Sulphur	Biofertilizer	No
55.	ICAR - Indian Institute of Spices Research, Kozhikode	<i>B. amyloliquefaciens</i> , <i>Acinetobacter bauhmanii</i> , <i>Bacillus megaterium</i> (Biocapsule formulation)	Biofertilizer	No
56.		<i>Bacillus safensis</i> , <i>B. amyloliquefaciens</i> , <i>Acinetobacter bauhmanii</i> , <i>Rauotella terrigena</i> (Biocapsule formulation)	Biofertilizer	No
57.		<i>Bacillus safensis</i> (Biocapsule formulation)	Biofertilizer	No
58.		<i>Bacillus licheniformis</i> (Biocapsule formulation)	Biofertilizer	No
59.		<i>Bacillus licheniformis</i> (Talc formulation)	Biofertilizer	No
60.		Lime based microbial formulations: Tricholime Bactolime Trichogypsum	Biofertilizer	No

		Bactogypsum		
61.		<i>Rhizophagus irregularis</i> (Arbuscular Mycorrhizal Fungi)	Biofertilizer	No
62.	ICAR - NRCG, Pune	<i>Kocuria sediminis</i> strain AC3 - liquid formulation	Biofertilizer	No
63.		<i>Bacillus inaquosorum</i> strain LC1- liquid formulation	Biofertilizer	No
64.		<i>Bacillus spizizenii</i> strain LC2 - liquid formulation	Biofertilizer	No
65.	ICAR - CSSRI, Karnal	Halo - CaRe	Biofertilizer	No
66.		CSR-Manage-R पराली प्रबंधक <i>Bio-decomposer for Paddy Residue Management</i>	Biofertilizer	No
67.	ICAR - IIHR, Bengaluru	Arka Microbial Sahishnu (Microbial Biostimulant)	Biofertilizer/ Biostimulant	No
68.	ICAR - NSRI, Indore	<i>Rhizomax</i> - <i>Bradyrhizobium daqingense</i> (moisture stress tolerant N - fixing soybean rhizobia)	Biofertilizer	No
69.		Microbial consortia (<i>Bradyrhizobium</i> sp. Zinc & P-solubilizing strains)	Biofertilizer	No
70.		Zinc-BIOFORT (<i>Bacillus aryabhataii</i>) zinc solubilizing and siderophore producing strain	Biofertilizer	No
71.	ICAR - ISRI, Lucknow	<i>Ikshu</i> Bio - trash decomposer	Biofertilizer	No
72.	ICAR - CRIDA, Hyderabad	CRIDA Resilia - 1	Biofertilizer	No
73.		CRIDA Resilia - 2	Biofertilizer	No

2. Biopesticides

Sr. No.	Institutes name	Product	Category	Commercialized
1.	ICAR - NBAIR, Bengaluru	Novel insecticidal WP formulations of <i>Heterorhabditis indica</i> (NBAIL Hi101) <i>Heterorhabditis bacteriophora</i> (NBAIL Hb105) and for the biological control of white grubs & other soil insect pests	Biopesticide	Yes
2.		Wettable powder formulation of <i>Heterorhabditis indica</i> strain NBAILH38 for management of white grubs and fall armyworm	Biopesticide	Yes
3.		Liquid formulation of indigenous <i>Bacillus thuringiensis</i> isolates against lepidopteran pests	Biopesticide	Yes
4.		Powder based formulation of <i>Pseudomonas fluorescens</i> (NBAIL-PFDWD), for diseases and Thrips species management	Biopesticide	Yes
5.		Bio formulation of salinity tolerant <i>Trichoderma harzianum</i> with biocontrol potential	Biopesticide	Yes
6.		Bioformulation of carbendazim tolerant <i>Trichoderma harzianum</i>	Biopesticide	Yes
7.		Powder based formulation of <i>Bacillus megaterium</i> NBAIL EXB53 as growth promoter	Biopesticide/ Biofertilizer	Yes
8.		Wettable Powder based formulation of <i>Bacillus megaterium</i> NBAIL 63 for the growth promoting ability in brinjal and tomato	Biopesticide/ Biofertilizer	Yes
9.		<i>Metarhizium anisopliae</i> ICAR-NBAIR Ma4 for management of white grubs in sugarcane	Biopesticide	Yes
10.		Aqueous formulation of <i>Spodoptera frugiperda</i> nucleopolyhedrovirus (SpfrNPV) NBAIL strain for the management of FAW	Biopesticide	Yes
11.		Bioformulation of <i>Bacillus subtilis</i> strain NBAIL BS1 for growth promotion	Biopesticide	Yes
12.		Entomopathogenic fungus <i>Isaria fumosorosea</i> (ICAR-NBAIR Pfu-5) for management of rugose spiralling whitefly <i>Aleurodicus rugioperculatus</i>	Biopesticide	Yes
13.		A plant volatile-based attractant for enhanced attraction of fruit fly.	Biopesticide	Yes
14.		A herbal based repellent for termites on woody trees-REPTER	Biopesticide	Yes

15.		Herbal swabber for the management of white stem borer <i>Xylotrechus quadripes</i> in coffee	Biopesticide	Yes
16.		Attractant for trapping uzi fly, <i>Exorista bombycis</i> , parasitoid pest on mulberry silkworm <i>Bombyx mori</i> based on pheromonal compounds	Biopesticide	Yes
17.		Insect repellent formulation and methods thereof	Biopesticide	Yes
18.	ICAR - IIOR, Hyderabad	<i>Bacillus thuringiensis</i> var. <i>kurstaki</i> DOR Bt-1 WP	Biopesticide	Yes
19.		<i>Trichoderma harzianum</i> Th4d SC	Biopesticide	Yes
20.		<i>Trichoderma harzianum</i> Th4d WP	Biopesticide	Yes
21.		<i>Beauveria bassiana</i> SC	Biopesticide	Yes
22.	ICAR - NRRI, Cuttack	<i>Trichoderma</i> based composition for control of plant pathogen	Biopesticide	Yes
23.	ICAR - IIPR, Kanpur	DALHNADERMA (<i>T. asperellum</i> , IIPRTh-31) (1.5%WP) (Talc based formulation)	Biopesticide/ Biostimulant	Yes
24.		Pulse booster (<i>T. afroharzianum</i> , IIPRTh-33) (1.5%WP) (Talc based formulation)	Biopesticide/ Biostimulant	Yes
25.		Dalhan Bio-consortia (<i>T. asperellum</i> + <i>B. subtilis</i>) Liquid formulation	Biopesticide/ Biostimulant	Yes
26.		Pulse Bio Guard (<i>T. harzianum</i> , IIPRTh-3) 2%WP Talc based under salinity stress condition	Biopesticide/ Biostimulant	Yes
27.		DalhanMonos (<i>Pseudomonas guariconensis</i> strain, MKCP-9) Liquid formulation	Biopesticide/ Biostimulant	Yes
28.	ICAR - Indian Institute of Spices Research, Kozhikode	Biocapsule Technology (Formulation)	Biopesticide	Yes
29.		<i>Trichoderma asperellum</i> (Talc formulation)	Biopesticide	Yes
30.		<i>Pochonia chlamydosporia</i> (Talc formulation)	Biopesticide	Yes
31.	ICAR - IIHR, Bengaluru	IIHR - <i>Trichoderma harzianum</i> - 1% W.P.	Biopesticide	Yes
32.		IIHR - <i>Trichoderma viride</i> - 1.5% W.P.	Biopesticide	Yes
33.		IIHR - <i>Pseudomonas fluorescens</i> - 1% W.P.	Biopesticide	Yes
34.		IIHR - <i>Pochonia chlamydosporia</i> - 1% W.P. (<i>Verticillium chlamydosporium</i>)	Biopesticide	Yes

35.	ICAR - SBI, Coimbatore	EPN Biopesticide Formulation Technology	Biopesticide	Yes
36.	ICAR - CPCRI, Kasaragod	<i>Trichoderma harzianum</i> (CPTD 28) talc formulation	Biopesticide	Yes
37.		<i>Trichoderma</i> coir pith cake	Biopesticide	Yes
38.		<i>Trichoderma</i> leaf sheath	Biopesticide	Yes
39.		<i>Trichoderma</i> arecanut leaf sheath powder block	Biopesticide	Yes
40.		<i>Metarhizium majus</i> talc formulation	Biopesticide	Yes
41.	ICAR - NBAIR, Bengaluru	<i>Metarhizium anisopliae</i> ICAR-NBAIR Ma35 for management of fall armyworm <i>Spodoptera frugiperda</i> in Maize	Biopesticide	No
42.		<i>Bacillus thuringiensis</i> ICAR-NBAIR - BT25 for management of fall armyworm <i>Spodoptera frugiperda</i> in Maize	Biopesticide	No
43.		A Novel <i>Bacillus albus</i> strain NBAIR-BATP with excellent insecticidal, antagonistic and growth promotion properties for the management of pests and diseases	Biopesticide	No
44.		Aqueous formulation of <i>Spilosoma obliqua</i> nucleopolyhedrovirus (SpobNPV ICAR -NBAIR1) for the management of Bihar hairy caterpillar <i>Spilosoma obliqua</i>	Biopesticide	No
45.		Aqueous formulation of <i>Helicoverpa armigera</i> nucleopolyhedrovirus HearNPV ICAR-NBAIR1 for the management of crop pest	Biopesticide	No
46.		Aqueous formulation of <i>Spodoptera litura</i> nucleopolyhedrovirus (SpliNPV ICAR -NBAIR1) for the management of <i>Spodoptera litura</i>	Biopesticide	No
47.		<i>Beauveria bassiana</i> NBAIR-Bb5a - A Potential Biopesticide for Management of Chewing and Sucking Pests of Cabbage	Biopesticide	No
48.		A novel <i>Lecanicillium fusisporum</i> NBAIR-VL8 strain with Insecticidal activity for the management of major sucking pests of Cotton and Okra	Biopesticide	No
49.		A Novel <i>Pseudomonas entomophila</i> NBAIR-PEOWN strain with Insecticidal activity for management of Shoot and Fruit Borer of Brinjal	Biopesticide	No
50.		<i>Trichoderma asperellum</i> (NBAIR-TATP) - A Potential Antagonist for Root Rot and Wilt Pathogens	Biopesticide	No
51.		A Novel microbial consortium of entomopathogenic bacteria for the management of <i>Thrips parvispinus</i> in chilli	Biopesticide	No
52.		A bisexual attractant for <i>Bactrocera dorsalis</i> in delta trap	Biopesticide	No

53.		Shatpada Dorsa-Delta an efficient trap for mango fruit fly	Biopesticide	No
54.	ICAR - NBAIM, Mau, U. P	Bio Pulse	Biopesticide	No
55.		Green Fungicide	Biopesticide	No
56.		Eco-Pesticide	Biopesticide	No
57.		Eco- Green Fungicide	Biopesticide	No
58.		Vardan 1	Biopesticide	No
59.		Bio Care	Biopesticide	No
60.		Crop Care	Biopesticide	No
61.	ICAR - IIOR, Hyderabad	<i>Bacillus thuringiensis</i> var. <i>kurstaki</i> DOR Bt-127 SC	Biopesticide	No
62.		Combination formulation of <i>Bacillus thuringiensis</i> var. <i>kurstaki</i> + <i>Beauveria bassiana</i> SC	Biopesticide	No
63.		Combination formulation of <i>Bacillus thuringiensis</i> var. <i>kurstaki</i> + <i>Metarhizium rileyi</i> SC	Biopesticide	No
64.		<i>Trichoderma asperellum</i> TaDOR 7316 WP	Biopesticide	No
65.		Biopolymer based <i>Trichoderma harzianum</i> Th4d (1% w/v) blend (Biocoat)	Biopesticide	No
66.	ICAR - NRRI, Cuttack	Microbial consortium (MC) for management of soil-borne fungal pathogens and leaf folder in organic rice-vegetables cropping system in Sikkim	Biopesticide	No
67.	ICAR - IIPR, Kanpur	IIPR Lep-kill	Biopesticide	No
68.		IIPR Pulse guard	Biopesticide	No
69.		Rhizo-nil Solid based	Biopesticide	No
70.	ICAR - Indian Institute of Spices Research, Kozhikode	<i>Trichoderma asperellum</i> (Biocapsule formulation)	Biopesticide	No
71.		Trichoprime (<i>Trichoderma asperellum</i> based formulation)	Biopesticide	No
72.		<i>Pochonia chlamydosporia</i> (Liquid formulation)	Biopesticide	No
73.		<i>Lecanicillium psalliotae</i> (Granular formulation)	Biopesticide	No
74.		<i>Metarhizium pingshaense</i> (Liquid formulation)	Biopesticide	No
75.		<i>Beauveria bassiana</i> (Liquid formulation)	Biopesticide	No
76.		<i>Spilarctia obliqua</i> Nucleopolyhedrovirus (<i>SpobNPV</i>) (Liquid formulation)	Biopesticide	No
77.		<i>Trichoderma asperelloides</i> 5R - liquid formulation	Biopesticide	No

78.	ICAR - NRCG, Pune	<i>Trichoderma afroharzianum</i> - liquid formulation	Biopesticide	No
79.		<i>Bacillus subtilis</i> DR 39 - liquid formulation	Biopesticide	No
80.		<i>Bacillus licheniformis</i> TL171 - liquid formulation	Biopesticide	No
81.		<i>Bacillus aerius</i> Cg1 - liquid formulation	Biopesticide	No
82.		<i>Bacillus subtilis</i> Cg 3 - liquid formulation	Biopesticide	No
83.		<i>Bacillus vazezensis</i> Cg2 - liquid formulation	Biopesticide	No
84.		<i>Bacillus australimaris</i> EB26 - liquid formulation	Biopesticide	No
85.		<i>Bacillus zhangzhouensis</i> EB45 - liquid formulation	Biopesticide	No
86.		<i>Metarhizium brunneum</i> , liquid formulation	Biopesticide	No
87.		<i>Trichoderma asperellum</i> MCBY2 - Solid formulation	Biopesticide	No
88.		<i>Bacillus subtilis</i> SB5- liquid formulation	Biopesticide	No
89.	ICAR - IIHR, Bengaluru	<i>Bacillus subtilis</i> (IIHR BS-2)	Biopesticide	No
90.		<i>Bacillus amyloliquefaciens</i> (IIHR BA-1)	Biopesticide	No
91.		<i>Trichoderma harzianum</i> (Th-2)	Biopesticide	No
92.		<i>Trichoderma harzianum</i> (HAR-4B)	Biopesticide	No
93.		<i>Trichoderma harzianum</i> (Th-10)	Biopesticide	No
94.		IIHR- <i>Metarhizium anisopliae</i> (Arka MetaBiocide)	Biopesticide	No
95.		IIHR- <i>Beauveria bassiana</i> 1% W.P.	Biopesticide	No
96.		Seed Pro (Microbial consortium of <i>Bacillus subtilis</i> OTPB1 and <i>Trichoderma harzianum</i> OTPB3)	Biopesticide	No
97.	ICAR - CICR, Nagpur	Bacterial-based volatiles composition as whitefly attractant	Biopesticide	No
98.		Bacterial-based volatiles composition as aphid attractant	Biopesticide	No
99.		Bacterial-based volatiles composition as thrip attractant	Biopesticide	No
100.		Bacterial-based volatiles composition as thrip attractant	Biopesticide	No
101.		Bacterial-based volatiles composition as beneficial insects attractant	Biopesticide	No

3. Biostimulants

Sr. No.	Institutes Name	Product	Category	Commercialized
1.	ICAR - CISH, Lucknow	CISH - Bioenhancer	Bio-stimulant	Yes
2.		ICAR - FUSICONT (CIBRC registration)	Bio-stimulant/ Biopesticide	Yes
3.		CISH - Metwash	Bio-stimulant	Yes
4.		ICAR - Bioimmunizer	Bio-stimulant	Yes
5.	ICAR - CIARI, Port Blair	Dweep Micro	Bio-stimulant/ Biofertilizer	Yes
6.	ICAR - NRC, Banana, Trichy	Bio-stimulant for improved growth and yield (No2wilt)	Bio-stimulant	Yes
7.	ICAR-NBAIM, Mau, U.P	Bio Sanjeevani	Bio-stimulant	No
8.		Kush SalBoost	Bio-stimulant	No
9.		Kush Phosphoboost	Bio-stimulant	No
10.	ICAR - VPKAS, Lucknow	Microbial Stimulant/Enhancer for Shortening Pinhead Initiation and Enhancing Yield of Edible Mushroom	Bio-stimulant	No