Trichoderma culture collection database

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, National Bureau of Agricultural Insect Resources (ICAR) Bellary Road , H. A. Farm Post, Bengaluru-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH1**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 Bangalore
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Tomato, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH2**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 Bangalore

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Tomato, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH3**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 Maho, UP
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH4**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 Maho, UP

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH5**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 Maho, UP
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

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	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH6**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 Maho, UP

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH7**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	 GKVK Bangalore.
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH8**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Commercial formulations

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH9**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Rajasthan, RAU
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH10**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Chettahalli

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH11**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	CCRI, Chikmangalur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad C.arabica, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH12**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Trichoderma organic pit

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH13**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	kanpur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

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	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH14**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangla

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Cotton, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH15**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Warangal
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Redgram, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH16**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	IIHR

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH17**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sdurga
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Groundnut, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH18**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Anekel

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH19**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Ananthpur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad , rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH20**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kanpur

Details of isolation	
Isolation by (Person and address)	R.D.Prasad
Isolation date	
Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	Chickpea, rhizosphere
Growth and maintenance	
Medium of growth	Potato Dextrose Agar
Medium for sporulation	Potato Dextrose Agar
Optimum temperature for growth	25 to 30 ^{o}C
Incubation time	5-7 days
Subculture period	Once in 3 months
Special requirement for growth and sporulation, if any	
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma harzianum* PDBCTH21**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Arabhavi
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Cotton, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** typically with paired branches forming over 150 µm of the length of terminal branches. Within these systems branches the longest branches form near the base of the system and nearest the main axis. Branches toward the tip and secondary branches tending to be held at 90° with respect to the axis from which they arise; further from the tip of the branching system the angle of branching tends to less than 90° with respect to the axis above. Cells supporting the phialides equivalent in width to, or at most only slightly wider than, the base of phialides arising from them.**Conidia** subglobose to ovoidal, (2.0-)2.7-3.5(-5.0) x (1.8-)2.5-3.0(-4.0) µm, L/W 1.1-1.2, smooth, green **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV1**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Hoskote Bangalore

Details of isolation	
Isolation by (Person and address)	R.D.Prasad
Isolation date	
Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	Beans, rhizosphere
Growth and maintenance	
Medium of growth	Potato Dextrose Agar
Medium for sporulation	Potato Dextrose Agar
Optimum temperature for growth	25 to 30 ^{o}C
Incubation time	5-7 days
Subculture period	Once in 3 months
Special requirement for growth and sporulation, if any	
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV2**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Devanahalli Bangalore
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Tamoto, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV3**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Beans, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV4**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Sugarcane, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV5**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Sugarcane, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV6**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore

Details of isolation	
Isolation by (Person and address)	R.D.Prasad
Isolation date	
Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	Sugarcane, rhizosphere
Growth and maintenance	
Medium of growth	Potato Dextrose Agar
Medium for sporulation	Potato Dextrose Agar
Optimum temperature for growth	25 to 30 ^{o}C
Incubation time	5-7 days
Subculture period	Once in 3 months
Special requirement for growth and sporulation, if any	
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV7**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Sugarcane, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV8**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Cauliflower, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV9**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Sunflower, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV10**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Rose, Green house
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV11**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV12**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV13**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV14**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV15**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV16**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV17**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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Name of the microorganisms	***Trichoderma viride*** **PDBCTV18**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV19**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bangalore(Hoskote)
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Plantation crops
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV20**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sollapur

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV21**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sollapur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV22**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	CCRI,Chickamangalur

Details of isolation	
Isolation by (Person and address)	R.D.Prasad
Isolation date	
Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	Areca ,rhizosphere
Growth and maintenance	
Medium of growth	Potato Dextrose Agar
Medium for sporulation	Potato Dextrose Agar
Optimum temperature for growth	25 to 30 ^{o}C
Incubation time	5-7 days
Subculture period	Once in 3 months
Special requirement for growth and sporulation, if any	
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV23**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	annigeri
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chickpea ,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV24**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sollapur

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize ,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV25**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Bombay Biocontrol company
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV26**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sollapur

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize ,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	-- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV27**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Jorhat
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Tea ,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV28**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Mautern

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Paddy ,rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV29**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Iskon
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV30**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Australia Bombay biocontrol Co

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV31**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Anekel
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Capsicum , rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV32**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Anekel

Details of isolation	
Isolation by (Person and address)	R.D.Prasad
Isolation date	
Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	Capsicum , rhizosphere
Growth and maintenance	
Medium of growth	Potato Dextrose Agar
Medium for sporulation	Potato Dextrose Agar
Optimum temperature for growth	25 to 30 ^{o}C
Incubation time	5-7 days
Subculture period	Once in 3 months
Special requirement for growth and sporulation, if any	
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	
Name of the Scientist maintaining and	S.Sriram, Senior Scientist

Designation	**Affiliation :** Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV33**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Anekel
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Capsicum , rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV34**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	GKVK Bangalore

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Mustard, rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV35**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Ananthapur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma viride*** **PDBCTV36**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kanpur

Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chickpea , rhizosphere
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	- **Conidiophores** on CMD typically comprising a fertile central axis or the central axis 100-150 µm long and flexuous, with lateral branches paired or not and typically arising at an angle at or near 90° with respect to its supporting branch, sometimes lateral branches at widely-spaced intervals when near the tip of the conidiophore and arising at closer intervals when more distant from the tip; phialides arising singly from the main axis or in whorls ot 2-3 at the tips of lateral branches or at the tip of the conidiophore. The central axis (1.7-)2.2-3.2(-4.5) µm wide.**Conidia** dark green, subglobose, on CMD, (3.0-)3.5-4.5(-5.0) x (2.7-)3.2-4.0(-4.8) µm, L/W = (0.8-)1.0-1.2(-1.5), conspicuously tuberculate. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS1**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS2**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS3**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS4**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kailer Himachal Pradesh
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Maize, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS5**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kailer Himachal Pradesh
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS6**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Salogda Himachal Pradesh
Details of isolation Isolation by (Person and address)	 R.D.Prasad

Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 Banana, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS7**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kailer Himachal Pradesh
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS8**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Maho Himachal Pradesh
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Chilly, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS9**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Maho Himachal Pradesh
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Chilly, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS10**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	CCRI Chickamangalur
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Jackfruit
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS11**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kailer Himachal Pradesh
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Maize, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS12**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kailer Himachal Pradesh
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Mustard, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma virens*** **PDBCTVS13**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Monakalmur, Karnataka
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Cotton, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma Koningii*** **PDBCTK1**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad .
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** arising more internally to the pustules, branches tend to be paired but internodes between branches short and phialides often held in penicillate heads of several; often pseudo whorls formed where phialides arise at short distances from each otherfrom a single cell rather than from a single point; phialides produced from the second type of conidiophore tending to be shorter and more conspicuously enlarged in the middle than those produced from the first type of conidiophore. The main axis of the conidiophore (1.9-)2.5-3.2(-3.8) µm wide. **Conidia** on CMD green, oblong to narrowly ellipsoidal, (3.0-)3.8-4.5(-5.0) x (1.9-)2.2-3.2(-4.3) µm, L/W (0.9-)1.3-1.9(-2.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma Koningii* PDBCTK2**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** arising more internally to the pustules, branches tend to be paired but internodes between branches short and phialides often held in penicillate heads of several; often pseudo whorls formed where phialides arise at short distances from each otherfrom a single cell rather than from a single point; phialides produced from the second type of conidiophore tending to be shorter and more conspicuously enlarged in the middle than those produced from the first type of conidiophore. The main axis of the conidiophore (1.9-)2.5-3.2(-3.8) µm wide. **Conidia** on CMD green, oblong to narrowly ellipsoidal, (3.0-)3.8-4.5(-5.0) x (1.9-)2.2-3.2(-4.3) µm, L/W (0.9-)1.3-1.9(-2.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma Koningii* PDBCTK3**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sollapur
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Tobacco, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** arising more internally to the pustules, branches tend to be paired but internodes between branches short and phialides often held in penicillate heads of several; often pseudo whorls formed where phialides arise at short distances from each otherfrom a single cell rather than from a single point; phialides produced from the second type of conidiophore tending to be shorter and more conspicuously enlarged in the middle than those produced from the first type of conidiophore. The main axis of the conidiophore (1.9-)2.5-3.2(-3.8) µm wide. **Conidia** on CMD green, oblong to narrowly ellipsoidal, (3.0-)3.8-4.5(-5.0) x (1.9-)2.2-3.2(-4.3) µm, L/W (0.9-)1.3-1.9(-2.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma Koningii* PDBCTK4**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kailer
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Bellpepper, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** arising more internally to the pustules, branches tend to be paired but internodes between branches short and phialides often held in penicillate heads of several; often pseudo whorls formed where phialides arise at short distances from each otherfrom a single cell rather than from a single point; phialides produced from the second type of conidiophore tending to be shorter and more conspicuously enlarged in the middle than those produced from the first type of conidiophore. The main axis of the conidiophore (1.9-)2.5-3.2(-3.8) µm wide. **Conidia** on CMD green, oblong to narrowly ellipsoidal, (3.0-)3.8-4.5(-5.0) x (1.9-)2.2-3.2(-4.3) µm, L/W (0.9-)1.3-1.9(-2.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma piluliferum*** **PDBCTP1**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Sollapur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**Conidiophores** arising more internally to the pustules, branches tend to be paired but internodes between branches short and phialides often held in penicillate heads of several; often pseudo whorls formed where phialides arise at short distances from each otherfrom a single cell rather than from a single point; phialides produced from the second type of conidiophore tending to be shorter and more conspicuously enlarged in the middle than those produced from the first type of conidiophore. The main axis of the conidiophore (1.9-)2.5-3.2(-3.8) µm wide. **Conidia** on CMD green, oblong to narrowly ellipsoidal, (3.0-)3.8-4.5(-5.0) x (1.9-)2.2-3.2(-4.3) µm, L/W (0.9-)1.3-1.9(-2.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
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	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma piluliferum*** **PDBCTP2**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date	Kailer

Collected by District and state	
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad Bellpepper, rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma piluliferum*** **PDBCTP3**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	CCRI, Chikmangalur
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	 R.D.Prasad C.arabica ,rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : sriram1702@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma piluliferum*** **PDBCTP4**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Kargal.
Details of isolation	

Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Healthy rice leaves.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	 Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI
Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	

Name of the Scientist maintaining and Designation	S.Sriram, Senior Scientist
	Affiliation : Patholgoy Lab, Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024
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	Fax No. : 080-23411961
Name of the microorganisms	***Trichoderma piluliferum*** **PDBCTP5**
Type of culture :	Fungus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state	Savadatti
Details of isolation Isolation by (Person and address) Isolation date Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc	R.D.Prasad Groundnut ,rhizosphere.
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and sporulation, if any	Potato Dextrose Agar Potato Dextrose Agar 25 to 30 ^{o}C 5-7 days Once in 3 months
Identified by	IARI

Geographical origin	
A brief description or distinctive features of the microorganism	**- Conidiophores** on CMD, gliocladium-like, (10.0)-40.6-63.5(-150.0) x (3.0-)4.9-5.3(.6.9) µm, arising in clusters from aerial mycelium, branching toward the tip, each branch terminating in a penicillus of (2-)3-6 closely appressed phialides, with a sterile stipe. **Conidia** on CMD green, broadly ellipsoidal to obovoid, (3.6-)4.5-4.7(-5.8) x (3.0-)3.9-4.0(-4.8) µm, L/W (0.9-)1.1-1.2(-1.5), smooth. **Ref: http://nt.ars-grin.gov/taxadescriptions/keys/**
Any record on RFLP/RAPD pattern or unique markers	**-**
Whether deposited microorganism is	Biocontrol agent
Taxonomic data	
Microorganism is deposited in	
Nature	Fungi
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	
Any other information	
Signature and date	