Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bengaluru-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Pseudomonas fluorescens (NBAIIAB-2)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Tomato, Bangalore
Collection date	
Collected by	2001
·	R. Rangeshwaran
District and state	Donaclone Vernetele
Details of isolation	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAIR, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	
	Rhizosphere
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	King's B Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran
Geographical origin	South India

A brief description or distinctive	Gram negative, short rods, plant growth promoter a biocontrol agent against
features of the microorganism	soil borne diseases
Any record on RFLP/RAPD pattern	•
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture: Bacterium
Pseudomonas putida (NBAIIAB-19)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Pigeon Pea, Kolar
Collection date	
	2001
Collected by	
District and state	R. Rangeshwaran
District and state	Kolar, Karnataka
	Notal, Kalliataka

Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAIR, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Rhizosphere
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	King's B Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive	Gram negative, short rods, plant growth promoter a biocontrol agent against
features of the microorganism	soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism	☐ Agriculturally important
is	g
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus sp. (MTCC 6535)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Chickpea endophyte, Gulbarga
Collection date	
Collected by	2002
Conceicd by	R. Rangeshwaran
District and state	T. Rangeonwaran
	Gulbarga, Karnataka
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAIR, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Tryptic Soya Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	IMTECH
Geographical origin	South India

A brief description or distinctive features of the microorganism	Gram positive, spore forming rods, plant growth promoter a biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus megaterium. (MTCC 6533)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Chickpea endophyte, Gulbarga
Collection date	2002
Collected by	2002
	R. Rangeshwaran
District and state	
	Gulbarga, Karnataka

Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAIR, Bellary Road , H. A. Farm Post, Bangalore-560024
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Leaf tissue
Growth and maintenance	
Medium of growth	Tryptic Soya Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	IMTECH
Geographical origin	South India
A brief description or distinctive	Gram positive, spore forming rods, plant growth promoter a biocontrol agent
features of the microorganism	against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism	☐ Agriculturally important
is	6 J T
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road, H. A. Farm Post, Bangalore-560024
Last First Middle	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus circulans (MTCC 6534)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Chickpea endophyte, Bangalore
Collection date	
Collected by	2002
,	R. Rangeshwaran
District and state	
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf)	Leaf tissue
stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Tryptic Soya Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	IMTECH
Geographical origin	South India

A brief description or distinctive features of the microorganism	Gram positive, spore forming rods, plant growth promoter a biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Erwinia herbicola (MTCC 6720)	
Details of source of culture	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Chickpea endophyte, Bangalore
Collection date	
	2002
Collected by	
District and state	R. Rangeshwaran
District and state	Bangalore, Karnataka

Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Leaf tissue
Growth and maintenance	
Medium of growth	Tryptic Soya Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	IMTECH
Geographical origin	South India
A brief description or distinctive features of the microorganism	Gram negative, short rods, plant growth promoter a biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Enterobacter agglomerans (MTCC 6536)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Chickpea endophyte, Bangalore
Collection date	2002
Collected by	2002
District and state	R. Rangeshwaran
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Lear tissue
Growth and maintenance	
Medium of growth	Tryptic Soya Agar
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	

Identified by	IMTECH
Geographical origin	South India
A brief description or distinctive	Gram negative, short rods, slime producer, plant growth promoter a
features of the microorganism	biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism	□ Agriculturally important
is	
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of t	he Depositor		Designation	:	Senior Scientist
Rajagopal	Rangeshwaran		Affiliation	:	National Bureau of Agricultural Insect Resources (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 356
			E mail	:	rangeshw@rediffmail.com
			Fax No.	:	080-23411961
Name of t	he microorganis	sms	Type of cult	ure	: Bacterium
Pseudon (MTCC 7.	nonas aerugino 512)	osa			
Details of	source of cultur	re			
Place of is	olation (Habitat o	crop, plant	Tomato rhizo	ospl	nere, Kolar
			2004		
Collection	date				
			R. Rangeshw	ara	n
Collected	by				
D'asia	1		Kolar, Karna	tak	a
District ar	a state				

Isolation by (Person and address) Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Special requirement for growth and sporulation, if any Intellectified by Geographical origin Any record on RFLP/RAPD pattern or unique markers Whether deposited in name of the proper of the prope	Details of isolation	
Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time 48-72hrs Subculture period Two months Special requirement for growth and sporulation, if any IMTECH Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature Leaf tissue Leaf tissue Leaf tissue Leaf tissue Leaf tissue Leaf tissue	Isolation by (Person and address)	,
Stem, roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth As 72hrs Subculture period Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is deposited in Nature Leaf tissue King's B Agar King's B Agar King's B Agar Mil Provide accession number, if Leaf tissue Angar King's B Agar King's B Agar King's B Agar Agar Agar Asgar Asgar Agar Asgar A		560024
Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Optimum temperature for growth Subculture period Two months Special requirement for growth and sporulation, if any Identified by IMTECH Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism I axonomic data Microorganism is deposited in Nature Nil Provide accession number, if Deposited at IMTECH, Chandigarh		Loof tiene
Medium of growth Medium for sporulation Optimum temperature for growth 28°C Incubation time 48-72hrs Subculture period Two months Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Nil Provide accession number, if Nature 28°C MTECH Two months MITECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases - Commondation of the microorganism of the	stem, roor, son, egg mass, msect, etc	Lear tissue
Medium of growth Medium for sporulation Optimum temperature for growth 28°C Incubation time 48-72hrs Subculture period Two months Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Nil Provide accession number, if 28°C Medium for sporulation A8-72hrs Two months Two months IMTECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases - against soil borne di		
Medium for sporulation Optimum temperature for growth 28 °C Incubation time 48-72hrs Subculture period Two months Special requirement for growth and sporulation, if any Identified by IMTECH Geographical origin A brief description or distinctive features of the microorganism and provide and provided microorganism is Whether deposited microorganism Agriculturally important is Taxonomic data Morphological, biochemical Microorganism is deposited in In slants Nature PGPR IPR/paten information, if any Nil Provide accession number, if Deposited at IMTECH, Chandigarh	Growth and maintenance	
Medium for sporulation Optimum temperature for growth 28 °C Incubation time 48-72hrs Subculture period Two months Special requirement for growth and sporulation, if any Identified by IMTECH Geographical origin A brief description or distinctive features of the microorganism efactures of the microorganism and provide markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Nil Provide accession number, if A8-72hrs 48-72hrs Two months IMTECH South India Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases - Agriculturally important In slants PGPR Nil Provide accession number, if Deposited at IMTECH, Chandigarh	Medium of growth	King's B Agar
Optimum temperature for growth 28 C Incubation time 48-72hrs Subculture period Two months Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Nil Provide accession number, if A8-72hrs Two months IMTECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases Any record on RFLP/RAPD pattern or unique markers Agriculturally important is Deposited at IMTECH, Chandigarh		
Incubation time 48-72hrs Two months Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism I axonomic data Microorganism is deposited in Nature 48-72hrs Two months IMTECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases - against soil borne diseases - Agriculturally important is I popple in In slants PGPR IPR/paten information, if any Nil Provide accession number, if Deposited at IMTECH, Chandigarh	Medium for sporulation	
Incubation time 48-72hrs Two months Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism I axonomic data Microorganism is deposited in Nature 48-72hrs Two months IMTECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases - against soil borne diseases - Agriculturally important is I popple in In slants PGPR IPR/paten information, if any Nil Provide accession number, if Deposited at IMTECH, Chandigarh	Ontimum temperature for growth	28°C
Subculture period Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if IMTECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases	Opunium temperature for growin	20 C
Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism I axonomic data Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if IMTECH South India Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases	Incubation time	48-72hrs
Special requirement for growth and sporulation, if any Identified by Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism I axonomic data Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if IMTECH South India Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases		
Identified by IMTECH Geographical origin A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature PR/paten information, if any Provide accession number, if IMTECH IMTECH IMTECH Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases - - - - - - - - - - - - -	Subculture period	Two months
Identified by IMTECH	Consist assument for succeeding d	
Identified by IMTECH Geographical origin South India A brief description or distinctive features of the microorganism Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases Any record on RFLP/RAPD pattern or unique markers - Whether deposited microorganism is □ Agriculturally important Taxonomic data □ Morphological, biochemical Microorganism is deposited in □ In slants Nature □ PGPR IPR/paten information, if any Nil Provide accession number, if Deposited at IMTECH, Chandigarh		
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases	·	IMTECH
Any record on RFLP/RAPD pattern or unique markers		
Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if - Agriculturally important In slants In slants IPR/paten information, if any Nil Deposited at IMTECH, Chandigarh		
or unique markers Whether deposited microorganism is □ Agriculturally important Taxonomic data □ Morphological, biochemical Microorganism is deposited in □ In slants Nature □ PGPR IPR/paten information, if any Nil Provide accession number, if Deposited at IMTECH, Chandigarh		biocontrol agent against soil borne diseases
Whether deposited microorganism is Agriculturally important Taxonomic data		-
Taxonomic data Image: Morphological, biochemical Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if Deposited at IMTECH, Chandigarh		
Taxonomic data Morphological, biochemical Microorganism is deposited in In slants PGPR	_	Agriculturany important
Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if Deposited at IMTECH, Chandigarh	15	
Microorganism is deposited in Nature IPR/paten information, if any Provide accession number, if Deposited at IMTECH, Chandigarh	Taxonomic data	☐ Morphological, biochemical
Nature □ PGPR IPR/paten information, if any Nil Provide accession number, if Deposited at IMTECH, Chandigarh		
Provide accession number, if Deposited at IMTECH, Chandigarh		□ PGPR
Provide accession number, if Deposited at IMTECH, Chandigarh		
Provide accession number, if Deposited at IMTECH, Chandigarh	IPP/notan information if any	Nil
	/	Doposited at Infilecti, Chandigain
Any other information		
Signature and date		

Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Yeast
Cryptococcus albidus (MTCC 7436)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Tomato Rhizosphere, Kolar
Collection date	
Collected by	2004
Conected by	D. Donoochuyaran
District and state	R. Rangeshwaran
	Kolar, Karnataka
Details of isolation	,
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	
	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Tryptic Soya Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	

Identified by	IMTECH
Geographical origin	South India
A brief description or distinctive	Yeast, spherical cells, slime producer, plant growth promoter a biocontrol
features of the microorganism	agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism	□ Agriculturally important
is	
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First I	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Pseudomonas aeruginosa (MTCC 7512)	
Details of source of culture	
Place of isolation (Habitat crop or animals etc)	plant Chickpea endophyte, Bangalore
Collection date	
	2002
Collected by	
	R. Rangeshwaran
District and state	
	Bangalore, Karnataka

Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	King's B Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	IMTECH
Geographical origin	South India
A brief description or distinctive	Gram negative, short rods, pigment producer, plant growth promoter a
features of the microorganism	biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism	☐ Agriculturally important
is	Agrediturary important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	☐ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	_
Signature and date	

Rajagopal Rangeshwaran Last First Middle Phone : 080-23511998 ext. 356 E mail : rangeshw@rediffmail.com Fax No. : 080-23411961 Name of the microorganisms Pseudomonas fluorescens (NBAIIAB7) Type of culture : Bacterium Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collected by District and state Details of isolation Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024	Name of the Depositor	Designation : Senior Scientist
Middle Phone	Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
E mail : rangeshw@rediffmail.com Fax No. : 080-23411961 Name of the microorganisms Pseudomonas fluorescens (NBAIIAB7) 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) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		Bellary Road , H. A. Farm Post, Bangalore-560024
Fax No. : 080-23411961 Name of the microorganisms Pseudomonas fluorescens (NBAIIAB7) Type of culture : Bacterium 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) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		
Name of the microorganisms Pseudomonas fluorescens (NBAIIAB7) 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) Type of culture: Bacterium Sunflower: Davangere Sunflower, Davangere Place of isolation (Habitat crop, plant or animals etc) R. Rangeshwaran Davangere, Karnataka Petails of isolation R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		E mail : rangeshw@rediffmail.com
Pseudomonas fluorescens (NBAIIAB7) 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) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		Fax No. : 080-23411961
Details of source of culture	Name of the microorganisms	Type of culture : Bacterium
Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state Details of isolation Isolation by (Person and address) Sunflower, Davangere R. Rangeshwaran Davangere, Karnataka R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		
plant or animals etc) Collection date 2004 Collected by District and state Davangere, Karnataka Details of isolation Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024	Details of source of culture	
Collected by R. Rangeshwaran District and state Davangere, Karnataka Details of isolation Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		Sunflower, Davangere
Collected by R. Rangeshwaran District and state Davangere, Karnataka Details of isolation Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024	Collection date	2004
District and state Davangere, Karnataka Details of isolation Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024	Collected by	
Details of isolation Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024	District and state	R. Rangeshwaran
Isolation by (Person and address) R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024		Davangere, Karnataka
	Details of isolation	
	Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date Leaf tissue	Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	Growth and maintenance	
Medium of growth King's B Agar	Medium of growth	King's B Agar
Medium for sporulation	Medium for sporulation	
Optimum temperature for growth 28°C	Optimum temperature for growth	28°C
Incubation time 48-72hrs	Incubation time	48-72hrs

Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive features of the microorganism	Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	Not Deposited
Any other information	
Signature and date	

Name of the Depositor	Designation: Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Pseudomonas fluorescens (NBAIIAB1)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Rice, Kottayam

Collection date	2002
Collected by	R. Rangeshwaran
District and state	Kottayam, Kerala
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	King's B Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive features of the microorganism	Gram negative, short rods, pigment producer, plant growth promoter a biocontrol agent against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	Not Deposited
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture: Bacterium
Alcalegenes odorans (NBAIIAB12)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Rice, Bangalore
Collection date	
Collected by	2003
District and state	R. Rangeshwaran
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	rhizosphere
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	King's B Agar
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	

Identified by	IMTECH
Geographical origin	South India
A brief description or distinctive	Gram negative, short rods, plant growth promoter a biocontrol agent against
features of the microorganism	soil borne diseases
Any record on RFLP/RAPD	-
pattern or unique markers	
Whether deposited microorganism	☐ Agriculturally important
is	
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Deposited at IMTECH, Chandigarh
deposited elsewhere	
Any other information	
Signature and date	

Name of	he Depositor	Designation: Senior Scientist	
Rajagopal	Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)	
Last	First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024	
		Phone : 080-23511998 ext. 356	
		E mail : rangeshw@rediffmail.com	
		Fax No. : 080-23411961	
Name of	he microorganisms	Type of culture : Bacterium	
Bacillus (NBAIIA)	pantothenticus 328)		
Details of	source of culture		
Place of is	olation (Habitat crop, plant etc)	Leaf Vegetable, Bangalore	
		2003	
Collection	date		
		R. Rangeshwaran	
Collected	by		
		Bangalore, Karnataka	
District ar	d state		

Details of isolation		
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road, H. A. Farm Post, Bangalore-560024	
Isolation date	Leaf tissue	
Specimen isolated from (eg. leaf)		
stem, roof, soil, egg mass, insect, etc		
Growth and maintenance		
Medium of growth	King's B Agar	
Medium for sporulation		
Optimum temperature for growth	28°C	
Incubation time	48-72hrs	
Subculture period	Two months	
Special requirement for growth and sporulation, if any		
Identified by	IMTECH	
Geographical origin	South India	
A brief description or distinctive	Gram positive, spore former, plant growth promoter a biocontrol agent against	
features of the microorganism	soil borne diseases	
Any record on RFLP/RAPD	-	
pattern or unique markers		
Whether deposited microorganism	□ Agriculturally important	
is		
Taxonomic data	☐ Morphological, biochemical	
Microorganism is deposited in	□ In slants	
Nature	□ PGPR	
IPR/paten information, if any	Nil	
Provide accession number, if	Deposited at IMTECH, Chandigarh	
deposited elsewhere		
Any other information		
Signature and date		

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus subtilis (NBAIIN22)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Pigeon pea, Raichur
Collection date	2002
Collected by	2003
District and state	R. Rangeshwaran
	Raichur, Karnataka
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	King's B Agar
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	

Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive	Gram positive, spore former, plant growth promoter a biocontrol agent
features of the microorganism	against soil borne diseases
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism	□ Agriculturally important
is	
Taxonomic data	☐ Morphological, biochemical
Microorganism is deposited in	□ In slants
Nature	□ PGPR
IPR/paten information, if any	Nil
Provide accession number, if	Not Deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of t	he Depositor	Designation	:	Senior Scientist
Rajagopal	Rangeshwaran	Affiliation	:	National Bureau of Agricultural Insect Resources (ICAR)
Last	First Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
		Phone	:	080-23511998 ext. 356
		E mail	:	rangeshw@rediffmail.com
		Fax No.	:	080-23411961
Name of	he microorganisms	Type of cultu	ıre	: Bacterium
Bacillus (NBAIIB	thuringiensis [1]			
7	0 1			
Details of	source of culture			
Place of is or animals	olation (Habitat crop, plant etc)	Bannerghatta	Вι	atterfly park, Bangalore
Collection	date			
		2006		
Collected	by			
		R. Rangeshwa	ara	n
District ar	d state			
		Bangalore, Ka	arn	ataka

Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	T3 medium
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive	Gram positive, bipyramidal crystal producer, spore former, insect pathogen
features of the microorganism	against lepidopterans
Any record on RFLP/RAPD pattern	SDS PAGE of crystal protein
or unique markers	— A - 2 1/ - 11 2
Whether deposited microorganism	□ Agriculturally important
is	
Taxonomic data	☐ Morphological, biochemical, toxicological, PCR
Microorganism is deposited in	☐ In slants
Nature	□ Insect pathogen
IPR/paten information, if any	Nil
Provide accession number, if	Not Deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus thuringiensis (NBAIIBT2)	
Details of source of culture	
Place of isolation (Habitat crop, plant	Western Ghat, Shimoga
or animals etc)	
Collection date	
Collected by	2007
District and state	R. Rangeshwaran
District and state	Shimoga, Karnataka
Details of isolation	Simioga, Hariataka
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	
	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	T3 medium
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	

Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive	Gram positive, bipyramidal crystal producer, spore former, insect pathogen
features of the microorganism	against lepidopterans
Any record on RFLP/RAPD pattern	SDS PAGE of crystal protein
or unique markers	
Whether deposited microorganism	□ Agriculturally important
is	
Taxonomic data	☐ Morphological, biochemical, toxicological, PCR
Microorganism is deposited in	□ In slants
Nature	☐ Insect pathogen
IPR/paten information, if any	Nil
Provide accession number, if	Not Deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus thuringiensis (HD-1)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Standard Isolate in collection of Dr. Bambavale, NCIPM
or annuals etc)	2007
Collection date	
Collected by	R. Rangeshwaran
District and state	

Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore- 560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	T3 medium
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran
Geographical origin	South India
A brief description or distinctive	Gram positive, bipyramidal crystal producer, spore former, insect pathogen
features of the microorganism	against lepidopterans
Any record on RFLP/RAPD pattern or unique markers	SDS PAGE of crystal protein
Whether deposited microorganism	☐ Agriculturally important
is	Agriculturary important
Taxonomic data	☐ Morphological, biochemical, toxicological, PCR
Microorganism is deposited in	□ In slants
Nature	☐ Insect pathogen
IPR/paten information, if any	Nil
Provide accession number, if	Not Deposited used only as standard strain for research purpose
deposited elsewhere	
Any other information	
Signature and date	

Name of the Depositor	Designation : Senior Scientist
Rajagopal Rangeshwaran	Affiliation : National Bureau of Agricultural Insect Resources (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 356
	E mail : rangeshw@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Bacterium
Bacillus thuringiensis (BNGT1)	
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Butterfly Park, Bannerghatta.
Collection date	2007
	R. Rangeshwaran
Collected by	
District and state	Bannerghatta, Bangalore
Details of isolation	
Isolation by (Person and address)	R. Rangeshwaran, NBAII, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	Leaf tissue
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	T3 medium
Medium for sporulation	
Optimum temperature for growth	28°C
Incubation time	48-72hrs
Subculture period	Two months
Special requirement for growth and sporulation, if any	
Identified by	R. Rangeshwaran

Geographical origin	South India
A brief description or distinctive features of the microorganism	Gram positive, rectangular crystal producer, spore former, insect pathogen against lepidopterans
Any record on RFLP/RAPD pattern or unique markers	SDS PAGE of crystal protein
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological, biochemical, toxicological, PCR
Microorganism is deposited in	□ In slants
Nature	☐ Insect pathogen
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	Not Deposited used only as standard strain for research purpose
Any other information	
Signature and date	