Entomofungal pathogens maintained at NBAIR

Name of the Depositor	Designation : Principal Scientist
Ramanujam Bonam	Affiliation : National Bureau of Agricultural Insect Resources (ICAR) Bellary Road , H. A. Farm Post, Bengaluru-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Ludhiana
Collection date	
	2006
Collected by	P. Romanujam
District and state	B. Ramanujam
	Ludhiana, Punjab
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Un known insect sp. (Rice Pest)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North India

A brief description or distinctive	•
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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	n: Principal Scientist
Ramanuja	m Bonam	Affiliation	: Project Directorate of Biological Control (ICAR)
Last	First M	iddle	Bellary Road , H. A. Farm Post, Bangalore-560024
		Phone	: 080-23511998 ext. 343
		E mail	: ramanujamb@rediffmail.com
		Fax No.	: 080-23411961
Name of t	he microorganisms	Type of cul	ture : Fungus
	bassiana (PDBC-Bb	-2) Beauveria b	passiana (PDBC-Bb-2)
Details of	source of culture		
Place of is animals et	olation (Habitat crop,	plant or Insect, Ban	galore
Collection	date		
		2006	
Collected	by		
District an	d state	B. Ramanuj	am
District an	u state	Bangalore,	Karnataka

Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem,	Un known insect sp.
roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
	2500
Optimum temperature for growth	25°C
To a final and the s	7 10 1
Incubation time	7-10 days
Sub outture maried	Three months
Subculture period	Three months
Special requirement for growth and	SDYA at 25°C and 80% RH
sporulation, if any	SDTA at 25 C and 60% KIT
sporumion, ir uniy	
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
IDD/noton information if and	NUI
IPR/paten information, if any Provide accession number, if	Nil Not deposited
deposited elsewhere	Not deposited
Any other information	
Signature and date	
Signification date	

Name of the Depositor	Designation: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
name in the second	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
	1 441 (0) 1 000 25 111701
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-3)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Bangalore
Collection date	
	2006
Collected by	
	B. Ramanujam
District and state	
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Adult insect of Neochetina bruchi
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH

Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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 : Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-4)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect , Bangalore
	2006
Collection date	
	B. Ramanujam
Collected by	, and the second
	Bangalore, Karnataka
District and state	

Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem,	Larvae of Spodoptera litura
roof, soil, egg mass, insect, etc	Larvae of Spouopiera mara
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
N. F. C. L.	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
of manage and desired	
Incubation time	7-10 days
Subculture period	Three months
	27 1 2 1 2 1 2
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
sportiation, if any	
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	Thoi deposited
Any other information	
Signature and date	
Signature and date	

Name of the Depositor	Designation : Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
Eust Tibe Wilder	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-5 & 5a)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Chettalli
Collection date	
Callantad has	2006
Collected by	D. Domonuiom
District and state	B. Ramanujam
	Coorg, Karnataka
Details of isolation	<i>O.</i>
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae and adults of <i>Hypothenemus hampei</i> (Coffee berry borer)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
- ··· ·- v	<u>, J∵</u>

Geographical origin	South India
A brief description or distinctive	•
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-6)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Attur
Collection date	
	2006
Collected by	
District and state	B. Ramanujam
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Adults of Tree Hopper (Insect not identified)
Growth and maintenance	
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	•
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-7)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Puttur
Collection date	
	2006
Collected by	
District and state	B. Ramanujam
District and state	Dalashina Kannada Kamataka
Details of isolation	Dakshina Kannada, Karnataka
Details of Isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Plocaederus ferrugineus (Cashew Stem Borer)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
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	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-8)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Guwahati
Collection date	
	2006
Collected by	
District and state	B. Ramanujam
	Guwahati, Assam
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Dicladispa armigera (Rice hispa)
Growth and maintenance	
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North-East India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of th	ne Depositor		Designation	:	Principal Scientist
Ramanujan	n Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-10)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect , Ludhiana
Collection date	2006
	B. Ramanujam
Collected by	Ludhiana, Punjab
District and state	Jan San San San San San San San San San S
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Cnaphalocrosis medinalis (Rice Leaf Folder)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil

Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

For Submission of Microbial Cultures

National Bureau of Agriculturally Important Microorganism (NBAIM)

Name of the Depositor	Designation: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-11)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Rajankunte
Collection date	
Collected by	2006
District and state	B. Ramanujam
District and state	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Nymphs and adults of <i>Tetranychus urticae</i> (Mites of Beans)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days

Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	☐ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
	Bellary Road, H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-12)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Guwahati
Collection date	
	2006
Collected by	
	B. Ramanujam
District and state	
	Guwahati, Assam

Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Cnaphalocrosis medinalis (Rice Leaf Folder)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North-East India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers Whether deposited microorganism is	☐ Agriculturally important
whether deposited interoorganism is	Agriculturary important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Affiliation : Project Directorate of Biological Control (ICAR) Bellary Road , H. A. Farm Post, Bangalore-560024	Name of the Depositor	Designation : Principal Scientist
Phone : 080-23511998 ext. 343 E mail : ramanujamb@rediffmail.com Fax No. : 080-23411961 Name of the microorganisms Type of culture : Fungus Beauveria bassiana (PDBC-Bb-13) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date 2006 Collected by B. Ramanujam District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024 Isolation date 2006 Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Special requirement for growth and SDYA at 25°C and 80% RH	Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Email : ramanujamb@rediffmail.com Fax No. : 080-23411961	Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
Fax No. : 080-23411961		Phone : 080-23511998 ext. 343
Name of the microorganisms Type of culture : Fungus Beauveria bassiana (PDBC-Bb-13) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 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 Insect, Thadiankudisai A. Farm Post, Bangalore-560024 Nymphs of Pentalonia nigronervosa (Banana Aphid) Sabouraud Dextrose Yeast Agar medium (SDYA) Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Tol days Subculture period Three months Special requirement for growth and		E mail : ramanujamb@rediffmail.com
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 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 Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Three months Special requirement for growth and SDYA at 25°C and 80% RH		Fax No. : 080-23411961
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 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 Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Three months Special requirement for growth and SDYA at 25°C and 80% RH		
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 Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Subculture period Special requirement for growth and SDYA at 25°C and 80% RH	Name of the microorganisms	Type of culture : Fungus
Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 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 Coptimum temperature for growth Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Three months Special requirement for growth and SDYA at 25°C and 80% RH		Beauveria bassiana (PDBC-Bb-13)
animals etc) Collection date Collected by District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Company of the properties of th	Details of source of culture	
Collected by District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth Incubation time 7-10 days Subculture period Special requirement for growth and SDYA at 25°C and 80% RH		Insect , Thadiankudisai
Collected by District and state B. Ramanujam Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Collection date	
District and state B. Ramanujam Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH		2006
District and state Dindugal District, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 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 Coptimum temperature for growth Sabouraud Dextrose Yeast Agar medium 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Collected by	
Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 2006 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	District and state	B. Ramanujam
Details of isolation	District and state	Dindugal District Tamil Nadu
Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 2006 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Details of isolation	Dindugar District, Tallin Wadu
Isolation date Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH		
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 Subculture period Special requirement for growth and Nymphs of Pentalonia nigronervosa (Banana Aphid) Nymphs of Pentalonia nigronervosa (Banana Aphid) Sabouraud Dextrose Yeast Agar medium (SDYA) Sabouraud Dextrose Yeast Agar medium 7-10 days Three months Special requirement for growth and SDYA at 25°C and 80% RH	Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024
roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Isolation date	2006
Growth and maintenance Sabouraud Dextrose Yeast Agar medium (SDYA) Medium of growth Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH		Nymphs of Pentalonia nigronervosa (Banana Aphid)
Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and Sabouraud Dextrose Yeast Agar medium 25°C 7-10 days Three months Special requirement for growth and SDYA at 25°C and 80% RH		
Medium for sporulation Optimum temperature for growth Incubation time Subculture period Special requirement for growth and Sabouraud Dextrose Yeast Agar medium 25°C 7-10 days Three months Special requirement for growth and SDYA at 25°C and 80% RH	Growth and maintenance	
Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Optimum temperature for growth	25°C
Special requirement for growth and SDYA at 25°C and 80% RH	Incubation time	7-10 days
	Subculture period	Three months
sportiation, if any	Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by B. Ramanujam	Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-14)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Doddaballapura
Collection date	
	2006
Collected by	
District and state	B. Ramanujam
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Un known Insect	
Growth and maintenance		
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium	
Optimum temperature for growth	25°C	
Incubation time	7-10 days	
Subculture period	Three months	
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH	
Identified by	B. Ramanujam	
Geographical origin	South India	
A brief description or distinctive features of the microorganism	-	
Any record on RFLP/RAPD pattern or unique markers	-	
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	□ Morphological	
Microorganism is deposited in	□ In slants	
Nature	□ Pathogenic to Insects	
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
Zust Tist Minute	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
	. 000-25411701
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-15)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Chennai
Collection date	
	2006
Collected by	
	B. Ramanujam
District and state	·
	Chennai, Tamil Nadu
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Unknown Insect
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH

Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-16)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Hoskote
·	2006
Collection date	
	B. Ramanujam
Collected by	
District and state	Bangalore, Karnataka
District and state	
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024

Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Holotrichia serrata (Root grub of Vegetables)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of th	e Depositor		Designation	:	Principal Scientist
Ramanujam	Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture : Fungus
Name of the microorganisms	Type of culture: Fungus
	Beauveria bassiana (PDBC-Bb-18, Bb-19, Bb-20)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Trichy
Collection date	
Collected by	June, 2007
•	B. Ramanujam
District and state	Trichy, Tamil Nadu
Details of isolation	Theny, Tanin I vadu
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024
Isolation date	June, 2007
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Banana Crop
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
T1 (10 11	
Identified by	B. Ramanujam
Geographical origin A brief description or distinctive	South India
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature Nature	□ Pathogenic to Insects

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-23)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Surkady
Collection date	
Concension date	14-03-2008
Collected by	14-03-2008
	B. Ramanujam
District and state	D. Rumanajum
	Karaikal, Pondicherry
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	14-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Maruca testulalis (Blackgram Spotted Pod Borer)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C

Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive features of the microorganism	-
Any record on RFLP/RAPD pattern or unique markers	-
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-24)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Karaikal
Collection date	
Collected by	15-03-2008

District and state	B. Ramanujam	
	Karaikal, Pondicherry	
Details of isolation		
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024	
Isolation date	15-03-2008	
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Micraspis sp. (Coccinellid beetle)	
Growth and maintenance		
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium	
Optimum temperature for growth	25°C	
Incubation time	7-10 days	
Subculture period	Three months	
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH	
Identified by	B. Ramanujam	
Geographical origin	South India	
A brief description or distinctive features of the microorganism	-	
Any record on RFLP/RAPD pattern	-	
or unique markers		
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	□ Morphological	
Microorganism is deposited in	□ In slants	
Nature	□ Pathogenic to Insects	
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
Eust 11st Made	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-25)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Nandalur
Collection date	
	15-03-2008
Collected by	
	B. Ramanujam
District and state	
	Karaikal, Pondicherry
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	15-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Nymphs of Nilaparvata lugens (Rice Brown Plant Hopper)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH

Identified by	B. Ramanujam	
Geographical origin	South India	
A brief description or distinctive	•	
features of the microorganism		
Any record on RFLP/RAPD pattern	-	
or unique markers		
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	□ Morphological	
Microorganism is deposited in	□ In slants	
Nature	□ Pathogenic to Insects	
IPR/paten information, if any	Nil	
Provide accession number, if	Not deposited	
deposited elsewhere		
Any other information		
Signature and date		

Name of	he Depositor	Designation: Principal Scientist
Ramanuja	m Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last	First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
		Phone : 080-23511998 ext. 343
		E mail : ramanujamb@rediffmail.com
		Fax No. : 080-23411961
Name of	he microorganisms	Type of culture : Fungus
		Beauveria bassiana (PDBC-Bb-26)
Details of	source of culture	
Place of is	olation (Habitat crop, plant c)	Insect, Kherdhar
		22-03-2008
Collection	date	
		B. Ramanujam
Collected	by	
	_	Solan, Himachal Pradesh
District ar		
Details of	isolation	
Isolation l	y (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024

Isolation date	22-03-2008
Specimen isolated from (eg. leaf) stem,	Grubs of <i>Brahmina</i> sp. (Potato Root Grub)
roof, soil, egg mass, insect, etc	1. (,
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	•
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	Two deposited
Any other information	
Signature and date	
Signature and date	

Name of the	ne Depositor		Designation	:	Principal Scientist
Ramanujan	m Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture: Fungus	
	Beauveria bassiana (PDBC-Bb-27)	
Details of source of culture		
Place of isolation (Habitat crop, plant or animals etc)	Soil, Sirkali	
Collection date		
Collected by	15-03-2008	
·	B. Ramanujam	
District and state	Karaikal, Pondicherry	
Details of isolation	Karaikai, Fondichen y	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024	
Isolation date	15-03-2008	
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Sugarcane Fields	
Growth and maintenance		
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium	
Optimum temperature for growth	25°C	
Incubation time	7-10 days	
Subculture period	Three months	
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH	
Identified by	B. Ramanujam	
Geographical origin	South India	
A brief description or distinctive features of the microorganism	-	
Any record on RFLP/RAPD pattern	-	
or unique markers		
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	□ Morphological	
Microorganism is deposited in	☐ In slants	
Nature Nature	□ Pathogenic to Insects	

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-28)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Kothattai
Collection date	
Collected by	15-03-2008
	B. Ramanujam
District and state	Variated Dandishamer
Details of isolation	Karaikal, Pondicherry
Details of Isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	15-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Rice Fallow fields
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days

Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-29)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Jorhat
	18-03-2008
Collection date	
	B. Ramanujam
Collected by	
	Jorhat, Assam
District and state	

Details of isolation					
Isolation by (Parson and address)	D. Bourseyiers, DDDC, Bellam, Book, H. A. Fanns, Book, Bourselon, 500004				
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024				
Isolation date	18-03-2008				
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Rice Fallow Fields				
Growth and maintenance					
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)				
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium				
Optimum temperature for growth	25°C				
Incubation time	7-10 days				
Subaultuma mania d					
Subculture period	Three months				
Special requirement for growth and	SDYA at 25°C and 80% RH				
sporulation, if any					
Identified by	B. Ramanujam				
Geographical origin	North-East India				
A brief description or distinctive	-				
features of the microorganism					
Any record on RFLP/RAPD pattern	-				
or unique markers					
Whether deposited microorganism is	□ Agriculturally important				
m : 14					
Taxonomic data Mioreographics is deposited in	□ Morphological				
Microorganism is deposited in	□ In slants				
Nature	□ Pathogenic to Insects				
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: Principal Scientist			
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)			
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024			
	Phone : 080-23511998 ext. 343			
	E mail : ramanujamb@rediffmail.com			
	Fax No. : 080-23411961			
Name of the microorganisms	Type of culture : Fungus			
	Beauveria bassiana (PDBC-Bb-30)			
Details of source of culture				
Place of isolation (Habitat crop, plant or animals etc)	Soil, Jorhat			
Collection date				
Collected by	18-03-2008			
Collected by	B. Ramanujam			
District and state	B. Kamanajam			
	Jorhat, Assam			
Details of isolation				
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024			
Isolation date	18-03-2008			
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Brinjal Fields			
Growth and maintenance				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
Optimum temperature for growth	25°C			
Incubation time	7-10 days			
Subculture period	Three months			
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH			
Identified by	B. Ramanujam			

Geographical origin	North-East India				
A brief description or distinctive	-				
features of the microorganism					
Any record on RFLP/RAPD pattern	-				
or unique markers					
Whether deposited microorganism is	□ Agriculturally important				
Taxonomic data	□ Morphological				
Microorganism is deposited in	□ In slants				
Nature	□ Pathogenic to Insects				
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: Principal Scientist		
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)		
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024		
	Phone : 080-23511998 ext. 343		
	E mail : ramanujamb@rediffmail.com		
	Fax No. : 080-23411961		
Name of the microorganisms	Type of culture : Fungus		
Beauveria bassiana (PDBC-Bb-31)			
Details of source of culture			
Place of isolation (Habitat crop, plant or animals etc)	Soil, Namdeora		
Collection date			
	18-03-2008		
Collected by			
District and state	B. Ramanujam		
	Jorhat, Assam		
Details of isolation			
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024		
Isolation date	18-03-2008		

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Rice Fallow Fields				
Growth and maintenance					
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)				
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium				
Optimum temperature for growth	25°C				
Incubation time	7-10 days				
Subculture period	Three months				
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH				
Identified by	B. Ramanujam				
Geographical origin	North-East India				
A brief description or distinctive	-				
features of the microorganism					
Any record on RFLP/RAPD pattern	-				
or unique markers					
Whether deposited microorganism is	□ Agriculturally important				
Taxonomic data	□ Morphological				
Microorganism is deposited in	☐ In slants				
Nature	□ Pathogenic to Insects				
IPR/paten information, if any	Nil				
Provide accession number, if	Not deposited				
deposited elsewhere					
Any other information					
Signature and date					

Name of the Depo	sitor	Designation	:	Principal Scientist
Ramanujam Bona	m	Affiliation	:	Project Directorate of Biological Control (ICAR)
Last Fi	rst Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
		Phone	:	080-23511998 ext. 343
		E mail	:	ramanujamb@rediffmail.com
		Fax No.	:	080-23411961

Name of the microorganisms	Type of culture: Fungus			
	Beauveria bassiana (PDBC-Bb-32)			
Details of source of culture				
Place of isolation (Habitat crop, plant or animals etc)	Soil, Jorhat			
Collection date				
Collected by	19-03-2008			
District and state	B. Ramanujam			
	Jorhat, Assam			
Details of isolation				
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024			
Isolation date	19-03-2008			
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Pineapple Fields			
Growth and maintenance				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
Optimum temperature for growth	25°C			
Incubation time	7-10 days			
Subculture period	Three months			
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH			
Identified by	B. Ramanujam			
Geographical origin	North-East India			
A brief description or distinctive	-			
features of the microorganism				
Any record on RFLP/RAPD pattern or unique markers	-			
Whether deposited microorganism is	☐ Agriculturally important			
Taxonomic data	□ Morphological			
Microorganism is deposited in	☐ In slants			
Nature	□ Pathogenic to Insects			

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
Name of the microorganisms	Type of culture : Fungus
	Beauveria bassiana (PDBC-Bb-33)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Karnal
Collection date	21.05.2000
Collected by	31-05-2008
District and state	B. Ramanujam
District and state	Karnal, Haryana
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	31-05-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil (Sodic Soils, Fallow areas)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days

Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
Traine of the incroorganisms	Type of culture. Tungus
Metarhizium anisopliae (PDBC-Ma-1)	Metarhizium anisopliae (PDBC-Ma-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Chickaballapur
	2006
Collection date	
	B. Ramanujam
Collected by	
District and state	Bangalore, Karnataka

Details of isolation	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024			
Isolation by (Person and address)	2006			
Isolation date	Soil from Tomato crop			
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc				
Growth and maintenance				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
Optimum temperature for growth	25°C			
Incubation time	7-10 days			
Subculture period	Three months			
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH			
Identified by	B. Ramanujam			
Geographical origin	South India			
A brief description or distinctive	-			
features of the microorganism				
Any record on RFLP/RAPD pattern or unique markers	-			
Whether deposited microorganism is	☐ Agriculturally important			
Whose apposed moreorganisms				
Taxonomic data	□ Morphological			
Microorganism is deposited in	□ In slants			
Nature	□ Pathogenic to Insects			
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture: Fungus
	Metarhizium anisopliae (PDBC-Ma-2)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Davanagere
Collection date	
Calle at 11	2006
Collected by	P. Domonujom
District and state	B. Ramanujam
	Davanagere, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Amasacta albistriga (Red Hairy Caterpillar)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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	:	Principal Scientist
Ramanujai	m Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961
Name of t	he microorgani	isms	Type of cult	ure	e : Fungus
			Metarhizium	an	isopliae (PDBC-Ma-3)
Details of	source of cultur	re			
Place of ise	olation (Habitat	crop, plant or	Insect, Kasar	ago	od
Collection	date				
			2006		
Collected b	ру				
District an	d state		B. Ramanuja	m	
			Kasaragod, I	Kera	ala
Details of	isolation				
Isolation b	y (Person and ac	ddress)	B. Ramanuja	m,	PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation of	late		2006		

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Oryctes rhinocerous (Coconut Rhinocerous Beetle)			
Growth and maintenance				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
Optimum temperature for growth	25°C			
	5 40 4			
Incubation time	7-10 days			
G 1 1	Thurs would be			
Subculture period	Three months			
Special requirement for growth and	SDYA at 25°C and 80% RH			
sporulation, if any	SD1A at 25 C and 60% R11			
sportalition, it unit				
Identified by	B. Ramanujam			
Geographical origin	South India			
A brief description or distinctive	-			
features of the microorganism				
Any record on RFLP/RAPD pattern	-			
or unique markers	A 1 1 11 11 11 11 11 11 11 11 11 11 11 1			
Whether deposited microorganism is	☐ Agriculturally important			
There was in 1-4-	- W1. 1			
Taxonomic data Microorganism is deposited in	☐ Morphological ☐ In slants			
Nature	□ Pathogenic to Insects			
Nature	1 addogenic to insects			
IPR/paten information, if any	Nil			
Provide accession number, if	Not deposited			
deposited elsewhere	1			
Any other information				
Signature and date				

Name of the Dep	ositor	Designation	:	Principal Scientist
Ramanujam Bor	nam	Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
		Phone	:	080-23511998 ext. 343
		E mail	:	ramanujamb@rediffmail.com
		Fax No.	:	080-23411961

Name of the microorganisms	Type of culture : Fungus			
	Metarhizium anisopliae (PDBC-Ma-4)			
Details of source of culture				
Place of isolation (Habitat crop, plant or animals etc)	Insect , Puttur			
Collection date				
Collected by	2006			
District and state	B. Ramanujam			
Details of isolation	Dakshina Kannada, Karnataka			
Details of Isolation				
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024			
Isolation date	2006			
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of <i>Plocaederus ferrugineus</i> (Cashew Stem Borer)			
Growth and maintenance				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
Optimum temperature for growth	25°C			
Incubation time	7-10 days			
Subculture period	Three months			
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH			
Identified by	B. Ramanujam			
Geographical origin	South India			
A brief description or distinctive	-			
features of the microorganism				
Any record on RFLP/RAPD pattern	-			
or unique markers Whether deposited microorganism is	☐ Agriculturally important			
Taxonomic data	□ Morphological			
Microorganism is deposited in	☐ In slants			
Nature	□ Pathogenic to Insects			

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
Metarhizium anisopliae (PDBC-Ma-5)	Metarhizium anisopliae (PDBC-Ma-5)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Coimbatore
	2006
Collection date	
	B. Ramanujam
Collected by	
District and state	Coimbatore, Tamil Nadu
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024
Isolation date	2006
Isolation date	2000
Specimen isolated from (eg. leaf) stem,	Grubs of <i>Holotrichia serrata</i> (Sugarcane root grub)
roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Modium of grown	Sabourand Devilose Teast Agai medium (SDTA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
	2.500
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months

Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
sportulation, if any	
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
Name of the incroorganisms	Type of culture. I ungus
Metarhizium anisopliae (PDBC-Ma-6)	Metarhizium anisopliae (PDBC-Ma-6)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Hoskote
	2006
Collection date	
	B. Ramanujam
Collected by	
	Bangalore, Karnataka
District and state	
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024

Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of <i>Plutella xylostella</i> (Diamond Back Moth of Cauliflower)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	•
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	1
Any other information	
Signature and date	

Name of th	ne Depositor		Designation	:	Principal Scientist
Ramanujan	n Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture : Fungus	
Metarhizium anisopliae (PDBC-Ma-7)	Metarhizium anisopliae (PDBC-Ma-7)	
Details of source of culture		
Place of isolation (Habitat crop, plant or animals etc)	Insect, Anand	
Collection date		
Collected by	2006	
•	B. Ramanujam	
District and state	Anand, Gujarat	
Details of isolation	Ananu, Oujarar	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024	
Isolation date	2006	
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Odoiporus longicollis (Banana Pseudo Stem Weevil)	
Growth and maintenance		
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium	
Optimum temperature for growth	25°C	
Incubation time	7-10 days	
Subculture period	Three months	
Special requirement for growth and	SDYA at 25°C and 80% RH	
sporulation, if any		
Identified by	B. Ramanujam	
Geographical origin	West India	
A brief description or distinctive	-	
features of the microorganism		
Any record on RFLP/RAPD pattern	-	
or unique markers		
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	☐ Morphological	
Microorganism is deposited in	☐ In slants	
Nature	□ Pathogenic to Insects	

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Metarhizium anisopliae (PDBC-Ma-8)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Myladumpara
	2006
Collection date	
Collected by	B. Ramanujam
,	Idukki, Kerala
District and state	
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Basilepta fulvicorne. (Root Grub of Cardamom)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Optimum temperature for growth	25°C

Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	☐ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
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	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
N 0.1	
Name of the microorganisms	Type of culture : Fungus
	Metarhizium anisopliae (PDBC-Ma-9)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Chennai,
	2006
Collection date	
	B. Ramanujam
Collected by	
	Chennai, Tamil Nadu
District and state	

Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024
Isolation by (Ferson and address)	B. Ramanujani, FDBC, Benary Road, H. A. Farm Fost, Bangalore-300024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of Oryctes rhinocerous (Coconut Rhinocerous Beetle)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Subculture period	Three months
Special requirement for growth and	SDYA at 25°C and 80% RH
sporulation, if any	
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	•
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers Whether deposited microorganism is	☐ Agriculturally important
whether deposited interoorganism is	Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture: Fungus
	Metarhizium anisopliae (PDBC-Ma-10)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Adugudi
Collection date	
~	18-09-2006
Collected by	
District and state	B. Ramanujam
District and state	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	18-09-2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Chilo partellus (Maize Stem Borer)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Metarhizium anisopliae (PDBC-Ma-11)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Guwahati
Collection date	
	02-10-2006
Collected by	V - 20 - 200
	B. Ramanujam
District and state	Guwahati, Assam
Details of isolation	Guwanati, 1155ani
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	02-10-2006

Specimen isolated from (eg. leaf) stem,	Larvae of Agrotis ipsilon (Potato Cut worm)
roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North-East India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
·	
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Name of the	e Depositor		Designation	:	Principal Scientist
Ramanujam	Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture : Fungus
	Metarhizium anisopliae (PDBC-Ma-13)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Bapatla
Collection date	05-12-2007
Conection date	B. Ramanujam
Collected by	Ongole, Andhra Pradesh
District and state	Oligore, Aliulia Frauesii
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	05-12-2007
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Coconut
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Metarhizium anisopliae (PDBC-Ma-14, Ma-14a Ma-14b)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Jorhat
Collection date	
	19-03-2008
Collected by	
	B. Ramanujam
District and state	To fact Access
Details of isolation	Jorhat, Assam
Details of Isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	19-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Tomato, Chillies and Cabbage crops
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months

Special requirement for growth and	SDYA at 25°C and 80% RH
sporulation, if any	
Identified by	B. Ramanujam
Geographical origin	North-East India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Metarhizium anisopliae (PDBC-Ma-15)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil , Jorhat
,	20-03-2008
Collection date	
	B. Ramanujam
Collected by	
	Bangalore, Karnataka
District and state	
Details of isolation	

Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	20-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Termite mounds from Tea Gardens
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North-East India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	•
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if	Not deposited
deposited elsewhere	
Any other information	
Signature and date	

Bellary Road , H. A. Farm Post, Bangalore-560024 Phone : 080-23511998 ext. 343 E mail : ramanujamb@rediffmail.com	Name of the Depositor	Designation: Principal Scientist
Phone : 080-23511998 ext. 343	Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Phone : 080-23511998 ext. 343 E mail : ramanujamb@rediffmail.com Fax No. : 080-23411961 Name of the microorganisms Type of culture : Fungus Metarhizium anisopliae (PDBC-Ma-16) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collected by B. Ramanujam District and state Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 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 25°C Incubation, if any Phone : 080-23511998 ext. 343 E mail : ramanujamperdiffinal.com Fax No. : 080-23411961 Retarious Allerian Allerian Fax No. : 080-23411961 Insect, Kherdhar Insect, Kherdhar Insect, Kherdhar Insect, Kherdhar Insect, Kherdhar B. Ramanujam Solan, Himachal Pradesh B. Ramanujam PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024 Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Three months Special requirement for growth and sporulation, if any	Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
Name of the microorganisms Type of culture: Fungus Metarhizium anisopliae (PDBC-Ma-16) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date 26-03-2008 B. Ramanujam District and state Solan, Himachal Pradesh Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 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 John Company of the months Subculture period Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH		Phone : 080-23511998 ext. 343
Name of the microorganisms Type of culture : Fungus Metarhizium anisopliae (PDBC-Ma-16) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date 26-03-2008 B. Ramanujam Solan, Himachal Pradesh Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 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 Action of the microorganisms Type of culture : Fungus Metarhizium anisopliae (PDBC-Ma-16) B. Ramanujam PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH		E mail : ramanujamb@rediffmail.com
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam District and state Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Pupae of Brahmina sp. from Potato Fallow Fields roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH		-
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam District and state Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Pupae of Brahmina sp. from Potato Fallow Fields roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH	Name of the microargenisms	Type of culture : Funcus
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date 26-03-2008 Collected by District and state Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth Insect, Kherdhar Insect, Leguar Insect, Check Insect I	Name of the iniciool gamsins	Type of culture. Fullgus
Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by District and state Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Special requirement for growth and sporulation, if any		Metarhizium anisopliae (PDBC-Ma-16)
animals etc) Collection date 26-03-2008 Collected by District and state Solan, Himachal Pradesh Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Details of source of culture	
Collected by District and state B. Ramanujam Solan, Himachal Pradesh Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 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 25°C Incubation time 7-10 days Subculture period Special requirement for growth and sporulation, if any Solan, Himachal Pradesh B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Selanguage of Brahmina sp. from Potato Fallow Fields Pupae of Brahmina sp. from Potato Fallow Fields Pupae of Brahmina sp. from Potato Fallow Fields Toronto Fallow Fields Toronto Fallow Fields Three months Sabouraud Dextrose Yeast Agar medium Subculture period Three months SpyA at 25°C and 80% RH	Place of isolation (Habitat crop, plant or animals etc)	Insect, Kherdhar
Collected by District and state B. Ramanujam Solan, Himachal Pradesh Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Collection date	
District and state B. Ramanujam Solan, Himachal Pradesh B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH		26-03-2008
District and state Solan, Himachal Pradesh B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Pupae of Brahmina sp. from Potato Fallow Fields Pupae of Brahmina sp. from Potato Fallow Fields Pupae of Brahmina sp. from Potato Fallow Fields Sabouraud Dextrose Yeast Agar medium (SDYA) Medium of growth Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and sporulation, if any	Collected by	
Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 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 25°C Incubation time 7-10 days Subculture period Special requirement for growth and sporulation, if any Solan, Himachal Pradesh B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 26-03-2008 Pupae of Brahmina sp. from Potato Fallow Fields Fields Special Fequirement for growth and sporulation, if any	District and state	B. Ramanujam
Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 26-03-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH	District and state	Solan, Himachal Pradesh
Isolation date 26-03-2008 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 Subculture period Special requirement for growth and sporulation, if any 26-03-2008 Pupae of Brahmina sp. from Potato Fallow Fields Sabouraud Dextrose Yeast Agar medium Sporulation time 50°C 7-10 days Subculture period Special requirement for growth and sporulation, if any	Details of isolation	Boldin, Tilliannia Tiladon
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 Subculture period Special requirement for growth and sporulation, if any Pupae of Brahmina sp. from Potato Fallow Fields Sabouraud Dextrose Yeast Agar medium (SDYA) Thought a spoulation (SDYA) Sabouraud Dextrose Yeast Agar medium Throat Agar medium Special Fallow Fields Special Fallow Fields	Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Medium for sporulation Optimum temperature for growth Incubation time Subculture period	Isolation date	26-03-2008
Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and sporulation, if any Sabouraud Dextrose Yeast Agar medium Three Medium (SDYA) Sabouraud Dextrose Yeast Agar medium (SDYA) Three medium (SDYA) Sabouraud Dextrose Yeast Agar medium (SDYA) Special Tequirement for growth and Special Requirement for growth and SDYA at 25°C and 80% RH	roof, soil, egg mass, insect, etc	Pupae of Brahmina sp. from Potato Fallow Fields
Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Growth and maintenance	
Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Incubation time 7-10 days Subculture period Three months Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Subculture period Three months Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Optimum temperature for growth	25°C
Special requirement for growth and sporulation, if any SDYA at 25°C and 80% RH	Incubation time	7-10 days
sporulation, if any	Subculture period	Three months
T14'C.11	Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by B. Kamanujam	Identified by	B. Ramanujam

Geographical origin	North India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
200	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-Vl-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect , Hessaraghatta
Collection date	2006
Collected by	2006
District and state	B. Ramanujam Bangalore, Karnataka
Details of isolation	Dangaiore, Karnataka
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Aphids of Vegetable crops
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH

Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-Vl-2c)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Abyala
Collection date	
	2006
Collected by	
•	B. Ramanujam
District and state	
	Coorg, Karnataka
Details of isolation	

Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Nymphs of Coccus viridis (Citrus Green Scale)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	☐ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road, H. A. Farm Post, Bangalore-560024
Inst Made	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
Tranc of the incroorganisms	Type of culture . Tungus
	Verticillium lecanii (PDBC-Vl-3f)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Suntikoppa
Collection date	
	2006
Collected by	
District and state	B. Ramanujam
District and state	Coorg, Karnataka
Details of isolation	Coorg, Kamataka
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Nymphs of Coccus viridis (Coffea Green Scale)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	☐ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-Vl- 4)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Coffee leaf rust infected lesions, Boikere
Collection date	
	2006
Collected by	
District and state	B. Ramanujam
	Coorg, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024

Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Rust Pustules of <i>Hemileia vastatrix</i> (Coffee Rust Fungus)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	☐ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-VI-7)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Nelamangala
Collection date	
Collected by	2006
Collected by	B. Ramanujam
District and state	D. Kamanajan
	Bangalore, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Nymphs of <i>Bemisia tabaci</i> (White flies of Vegetable Crops)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-VI- 8)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Soil, Chennai
Collection date	
Concensis dute	2006
Collected by	
District and state	B. Ramanujam
	Chennai, Tamil Nadu
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Rice Fallows			
Growth and maintenance				
Growth and maintenance				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
Optimum temperature for growth	25°C			
Incubation time	7-10 days			
Subculture period	Three months			
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH			
Identified by	B. Ramanujam			
Geographical origin	South India			
A brief description or distinctive	-			
features of the microorganism				
Any record on RFLP/RAPD pattern	-			
or unique markers				
Whether deposited microorganism is	□ Agriculturally important			
·				
Taxonomic data	□ Morphological			
Microorganism is deposited in	□ In slants			
Nature	□ Pathogenic to Insects			
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 : Principal Scientist			
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)			
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024			
	Phone : 080-23511998 ext. 343			
	E mail : ramanujamb@rediffmail.com			
	Fax No. : 080-23411961			
Name of the microorganisms	Type of culture: Fungus			
	Verticillium lecanii (PDBC-VI- 10)			
Details of source of culture				
Place of isolation (Habitat crop, plant or				
animals etc)				
,	Insect, Rajankunte			
Collection date				
	27-10-2006			
Collected by				
District and state	B. Ramanujam			
District and state	Dencelore Vermetels			
Details of isolation	Bangalore, Karnataka			
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024			
	27 10 200 6			
Isolation date	27-10-2006			
Specimen isolated from (eg. leaf) stem,	Nymphs of Aphis craccivora			
roof, soil, egg mass, insect, etc	Trympus of riphus cructivoru			
Growth and maintenance				
N. F. C. 3				
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)			
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium			
-				
Optimum temperature for growth	25°C			
Incubation time	7-10 days			
Subculture period	Three months			
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH			
Identified by	B. Ramanujam			
	<u> </u>			

Geographical origin	South India		
A brief description or distinctive	-		
features of the microorganism			
Any record on RFLP/RAPD pattern	-		
or unique markers			
Whether deposited microorganism is	□ Agriculturally important		
Taxonomic data	□ Morphological		
Microorganism is deposited in	□ In slants		
Nature	□ Pathogenic to Insects		
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	:	Principal Scientist
Ramanujam Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
		Phone	:	080-23511998 ext. 343
		E mail	:	ramanujamb@rediffmail.com
		Fax No.	:	080-23411961
Name of the microorga	nnisms	Type of cult	ure	e: Fungus
		Verticillium l	lecc	anii (PDBC-VI- 13)
Details of source of cul	ture			
Place of isolation (Habitanimals etc)	tat crop, plant or	Soil, Trichy		
Collection date				
Concensis date		June, 2007		
Collected by		2007		
•		B. Ramanuja	m	
District and state				
		Trichy, Tamil Nadu		
Details of isolation				
Isolation by (Person and	address)	B. Ramanuja	m,	PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date		June, 2007		

Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Soil from Banana crop		
Growth and maintenance			
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)		
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium		
Optimum temperature for growth	25°C		
Incubation time	7-10 days		
Subculture period	Three months		
	GDVA - 250G - 1000/ DVA		
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH		
sportiation, if any			
Identified by	D. Domonuiom		
Geographical origin	B. Ramanujam South India		
A brief description or distinctive	-		
features of the microorganism	-		
Any record on RFLP/RAPD pattern			
or unique markers			
Whether deposited microorganism is	□ Agriculturally important		
Taxonomic data	□ Morphological		
Microorganism is deposited in	□ In slants		
Nature	□ Pathogenic to Insects		
IPR/paten information, if any	Nil		
Provide accession number, if	Not deposited		
deposited elsewhere			
Any other information			
Signature and date			

Bellary Road , H. A. Farm Post, Bangalore-560024	Name of the Depositor	Designation: Principal Scientist
Phone : 080-23511998 ext. 343 E mail : ramanujamb@rediffmail.com Fax No. : 080-23411961 Name of the microorganisms Type of culture : Fungus Verticillium lecanii (PDBC-VI-14) Details of source of culture Place of isolation (Habitat crop. plant or animals etc) Collection date 14-07-2008 Collected by B. Ramanujam District and state Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH	Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Phone : 080-23511998 ext. 343 E mail : ramanujamb@rediffmail.com Fax No. : 080-23411961 Name of the microorganisms Type of culture : Fungus Verticillium lecanii (PDBC-VI-14) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date 14-07-2008 Collected by B. Ramanujam District and state Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH	Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
E mail : ramanujamb@rediffmail.com	Zust Tist Market	Phone : 080-23511998 ext. 343
Name of the microorganisms Type of culture: Fungus Verticillium lecanii (PDBC-VI- 14) Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 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 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH		
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam District and state Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 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 Coimbatore, Tamil Nadu Tea Aphids (Toxoptera aurantii) Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth Three months Subculture period Special requirement for growth and SDYA at 25°C and 80% RH		
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam District and state Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 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 Coimbatore, Tamil Nadu Tea Aphids (Toxoptera aurantii) Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth Three months Subculture period Special requirement for growth and SDYA at 25°C and 80% RH	Nome of the mismon areasisms	Thurs of sulfaces a Faces
Details of source of culture Place of isolation (Habitat crop, plant or animals etc) Collection date 14-07-2008 Collected by B. Ramanujam Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 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 Company Sabouraud Dextrose Yeast Agar medium Company Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Name of the microorganisms	Type of culture: Fungus
Place of isolation (Habitat crop, plant or animals etc) Collection date Collected by B. Ramanujam Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 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 Collection date Three months Special requirement for growth and SDYA at 25°C and 80% RH		Verticillium lecanii (PDBC-VI- 14)
animals etc) Collection date Collected by District and state Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 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 Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth Three months Special requirement for growth and SDYA at 25°C and 80% RH	Details of source of culture	
Collected by B. Ramanujam Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH	Place of isolation (Habitat crop, plant or animals etc)	Insect, Valparai
District and state B. Ramanujam Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Collection date	
B. Ramanujam Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months SDYA at 25°C and 80% RH		14-07-2008
District and state Coimbatore, Tamil Nadu Details of isolation Isolation by (Person and address) B. Ramanujam, PDBC, Bellary Road, H. A. Farm Post, Bangalore-560024 Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Collected by	
Coimbatore, Tamil Nadu	District and state	B. Ramanujam
B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024	District and state	Coimbatore, Tamil Nadu
Isolation date 14-07-2008 Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Optimum temperature for growth 15°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SpyA at 25°C and 80% RH	Details of isolation	Commounter, Turm Title
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 Subculture period Special requirement for growth and Tea Aphids (Toxoptera aurantii) Tea Aphids (Toxoptera aurantii) Sabouraud Dextrose Yeast Agar medium (SDYA) Sabouraud Dextrose Yeast Agar medium 7-10 days Three months Special requirement for growth and SDYA at 25°C and 80% RH	Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
roof , soil, egg mass, insect, etc Growth and maintenance Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Isolation date	14-07-2008
Medium of growth Sabouraud Dextrose Yeast Agar medium (SDYA) Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	roof, soil, egg mass, insect, etc	Tea Aphids (Toxoptera aurantii)
Medium for sporulation Sabouraud Dextrose Yeast Agar medium Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Growth and maintenance	
Optimum temperature for growth 25°C Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Incubation time 7-10 days Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Subculture period Three months Special requirement for growth and SDYA at 25°C and 80% RH	Optimum temperature for growth	25°C
Special requirement for growth and SDYA at 25°C and 80% RH	Incubation time	7-10 days
	Subculture period	Three months
	Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by B. Ramanujam	Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	☐ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-VI-15)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Appangala
,	19-07-2008
Collection date	200
Collected by	B. Ramanujam
Conected by	Company to the
District and state	Coorg, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024

Isolation date	19-07-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Pepper Scale (Lepidospahes sp.)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
IPR/paten information, if any	Nil
Provide accession number, if deposited elsewhere	Not deposited
Any other information	
Signature and date	

Name of th	ne Depositor		Designation	:	Principal Scientist
Ramanujan	n Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-VI- 16)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Chettalli
Collection date	18-07-2008
Collected by	B. Ramanujam
District and state	Coorg, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	18-07-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Spiraling White Fly (Aleurodicus dispersus.)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive features of the microorganism	-
Any record on RFLP/RAPD pattern	-
or unique markers	A griculturally important
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Verticillium lecanii (PDBC-Vl-17)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Chettalli
,	18-07-2008
Collection date	
	B. Ramanujam
Collected by	
	Coorg, Karnataka
District and state	
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	18-07-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Coffee Mealy Bug (Planococcus lilacinus)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months

Special requirement for growth and	SDYA at 25°C and 80% RH
sporulation, if any	
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Nomuraea rileyi (PDBC-Nr-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Kurnool
	2006
Collection date	
	B. Ramanujam
Collected by	
	Kurnool, Andhra Pradesh
District and state	

Details of isolation	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation by (Person and address)	2006
Isolation date	Larvae of Spodoptera litura from Cotton Fields
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Maltose Yeast Agar medium (SMYA)
Medium for sporulation	Sabouraud Maltose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SMYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers Whether deposited microorganism is	☐ Agriculturally important
"Themer deposited interoorganism is	2.5.10 actuary important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road, H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Nomuraea rileyi (PDBC-Nr-3)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Chinthamani
Collection date	
Collected by	2006
Collected by	B. Ramanujam
District and state	D. Ramanajani
	Kolar, Karnataka
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Achaea janata (Semi looper)
Growth and maintenance	
Medium of growth	Sabouraud Maltose Yeast Agar medium (SMYA)
Medium for sporulation	Sabouraud Maltose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SMYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	☐ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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 : Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
ū	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Nomuraea rileyi (PDBC-Nr-20)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect , Warangal
Collection date	
	2006
Collected by	
	B. Ramanujam
District and state	
	Warangal, Andhra Pradesh
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006

Specimen isolated from (eg. leaf) stem,	Larvae of Helicoverpa armigera (Cotton Bollworm)
roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Maltose Yeast Agar medium (SMYA)
Medium for sporulation	Sabouraud Maltose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SMYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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 : Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
Eust 11st Wilder	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	W. J. (PDDG N. 40)
	Nomuraea rileyi (PDBC-Nr-29)
Details of source of culture	
Place of isolation (Habitat crop, plant or	Insect, Devanahalli
animals etc)	moce, povananam
difficulty etc)	
Collection date	
	2006
Collected by	
	B. Ramanujam
District and state	
	Warangal, Andhra Pradesh
Details of isolation	
T 1 2 1 (D) 1 11)	D.D DDDCD II D. I HAE D. D. I 500004
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	2006
Isolation date	2000
Specimen isolated from (eg. leaf) stem,	Larvae of <i>Helicoverpa armigera</i> (Redgram Pod Borer)
roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Maltose Yeast Agar medium (SMYA)
Madium for anomalation	Cahayrand Maltaga Vacat Agan madir
Medium for sporulation	Sabouraud Maltose Yeast Agar medium
Optimum temperature for growth	25°C
Spannam temperature for growin	
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and	SMYA at 25°C and 80% RH
sporulation, if any	
X1 (100 X1	D.D.
Identified by	B. Ramanujam

Geographical origin	South India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Nomuraea rileyi (PDBC-Nr-44)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Jorhat
Collection date	
	19-03-2008
Collected by	
Division 1 and	B. Ramanujam
District and state	
D 4 11 61 1 41	Jorhat, Assam
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024

Isolation date	19-03-2008
Specimen isolated from (eg. leaf) stem,	Larvae of Pieris brassicae (Cabbage Butterfly)
roof, soil, egg mass, insect, etc	
Growth and maintenance	
Medium of growth	Sabouraud Maltose Yeast Agar medium (SMYA)
Medium for sporulation	Sabouraud Maltose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
	27 27 27 27 27 27 27 27 27 27 27 27 27 2
Special requirement for growth and	SMYA at 25°C and 80% RH
sporulation, if any	
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive	-
A brief description or distinctive features of the microorganism	-
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern	-
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers	-
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern	
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers	-
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is	- Agriculturally important
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data	- Agriculturally important Morphological
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	- Agriculturally important Morphological
A brief description or distinctive features of the microorganism Any record on RFLP/RAPD pattern or unique markers Whether deposited microorganism is Taxonomic data	- Agriculturally important Morphological
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	- Agriculturally important Morphological
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	- Agriculturally important Morphological In slants Pathogenic to Insects
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	- Agriculturally important Morphological
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	- Agriculturally important Morphological In slants Pathogenic to Insects
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 deposited elsewhere	- Agriculturally important Morphological
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	- Agriculturally important Morphological

Name of the	he Depositor		Designation	:	Principal Scientist
Ramanujar	n Bonam		Affiliation	:	Project Directorate of Biological Control (ICAR)
Last	First	Middle			Bellary Road , H. A. Farm Post, Bangalore-560024
			Phone	:	080-23511998 ext. 343
			E mail	:	ramanujamb@rediffmail.com
			Fax No.	:	080-23411961

Name of the microorganisms	Type of culture: Fungus
	Fusarium pallidoroseum (PDBC-Fp-2)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Kothattai
Collection date	15-03-2008
Collected by	B. Ramanujam
District and state	Karaikal, Pondicherry
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	15-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Larvae of Cnaphalocrosis medinalis (Rice Leaf Folder)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	South India
A brief description or distinctive features of the microorganism	-
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects

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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Cladosporium oxysporum , (PDBC-Co-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Jorhat
Collection date	
Conceron dute	19-03-2008
Collected by	17 03 2000
•	B. Ramanujam
District and state	
	Jorhat, Assam
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	19-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Nymphs of <i>Lipaphis erysimi</i> (Mustard aphid)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C

Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam
Geographical origin	North-East India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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	: Principal Scientist
Ramanujam Bonam	Affiliation	: Project Directorate of Biological Control (ICAR)
Last First Middle		Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone	: 080-23511998 ext. 343
	E mail	: ramanujamb@rediffmail.com
	Fax No.	: 080-23411961
Name of the microorganisms	Type of cult	ure: Fungus
	Cladosporiu	n oxysporum , (PDBC-Co-2)
Details of source of culture		
Place of isolation (Habitat crop, plant or animals etc)	Insect, Allen	gmora
Collection date		

Collected by	19-03-2008	
District and state	B. Ramanujam	
	Jorhat, Assam	
Details of isolation		
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024	
Isolation date	19-03-2008	
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Brinjal sucking pest	
Growth and maintenance		
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium	
Optimum temperature for growth	25°C	
Incubation time	7-10 days	
Subculture period	Three months	
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH	
Identified by	B. Ramanujam	
Geographical origin	North-East India	
A brief description or distinctive	-	
features of the microorganism		
Any record on RFLP/RAPD pattern or unique markers	-	
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	□ Morphological	
Microorganism is deposited in	□ In slants	
Nature Nature	□ Pathogenic to Insects	
IPR/paten information, if any	Nil	
Provide accession number, if	Not deposited	
deposited elsewhere	The deposited	
Any other information		
Signature and date		
<u> </u>		

Name of the Depositor	Designation: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Paecilomyces sp. (PDBC-P-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Kherdhar
Collection date	
Callege	26-03-2008
Collected by	D. Demografian
District and state	B. Ramanujam
	Solan, Himachal Pradesh
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	26-03-2008
Specimen isolated from (eg. leaf) stem, roof, soil, egg mass, insect, etc	Grubs of <i>Brahmina</i> sp. from Potato fields (Potato root grub)
Growth and maintenance	
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium
Optimum temperature for growth	25°C
Incubation time	7-10 days
Subculture period	Three months
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH
Identified by	B. Ramanujam

Geographical origin	North India
A brief description or distinctive	-
features of the microorganism	
Any record on RFLP/RAPD pattern	-
or unique markers	
Whether deposited microorganism is	□ Agriculturally important
Taxonomic data	□ Morphological
Microorganism is deposited in	□ In slants
Nature	□ Pathogenic to Insects
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: Principal Scientist
Ramanujam Bonam	Affiliation : Project Directorate of Biological Control (ICAR)
Last First Middle	Bellary Road , H. A. Farm Post, Bangalore-560024
	Phone : 080-23511998 ext. 343
	E mail : ramanujamb@rediffmail.com
	Fax No. : 080-23411961
Name of the microorganisms	Type of culture : Fungus
	Paecilomyces variotii (PDBC-Pv-1)
Details of source of culture	
Place of isolation (Habitat crop, plant or animals etc)	Insect, Valparai
Collection date	
Concetion date	04-08-2008
Collected by	04-00-2008
	B. Ramanujam
District and state	217.4
	Coimbatore, Tamil Nadu
Details of isolation	
Isolation by (Person and address)	B. Ramanujam, PDBC, Bellary Road , H. A. Farm Post, Bangalore-560024
Isolation date	04-08-2008

Specimen isolated from (eg. leaf) stem,	Nymphs of Oligonychus coffeae (Tea Red spider Mites)	
roof, soil, egg mass, insect, etc		
Growth and maintenance		
Medium of growth	Sabouraud Dextrose Yeast Agar medium (SDYA)	
Medium for sporulation	Sabouraud Dextrose Yeast Agar medium	
Optimum temperature for growth	25°C	
Incubation time	7-10 days	
Subculture period	Three months	
Special requirement for growth and sporulation, if any	SDYA at 25°C and 80% RH	
Identified by	B. Ramanujam	
Geographical origin	South India	
A brief description or distinctive	-	
features of the microorganism		
Any record on RFLP/RAPD pattern	-	
or unique markers		
Whether deposited microorganism is	□ Agriculturally important	
Taxonomic data	□ Morphological	
Microorganism is deposited in	□ In slants	
Nature	□ Pathogenic to Insects	
IPR/paten information, if any	Nil	
Provide accession number, if	Not deposited	
deposited elsewhere		
Any other information		
Signature and date		