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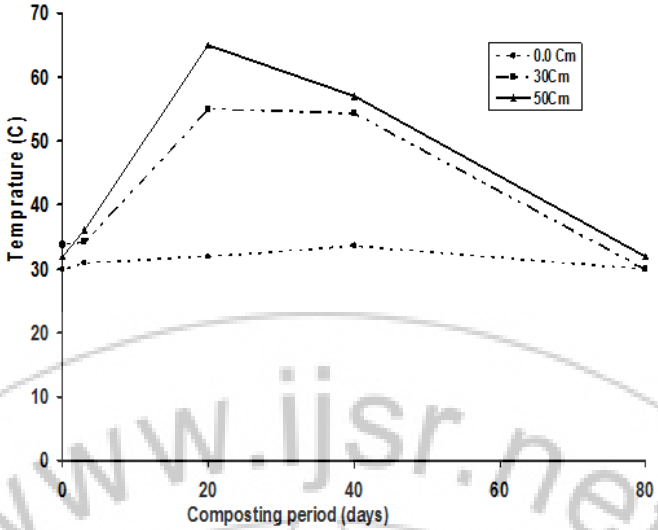

Figure 1: Temperature changes of compost heaps at different time intervals during compositing process

Table 1: Colonization of mesophilic bacteria to different compost heaps at different composting periods. Data are expressed as the mean number of colony / agar plate of five replicates.

Comp. periods (days)	*Bacterial sp.*	*Comp. A*			*Comp. B*			*Comp. C*			*Comp. D*		
		No.of colony	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*
0	*Staphylococcus aureus*	70	150	46.7	50	150	33.3	70	165	42.4	50	160	31.25
	Staph. Xyloseus	60		40	60		40	70		42.4	70		43.75
	Bacillus sp.	20		13.3	40		26.7	25		15.2	40		25
3	*Staphylococcus aureus*	50	180	27.8	60	200	30	50	200	25	80	210	38.1
	Staphylococcus xyloseu	0.0		0.0	60		30	60		30	70		33.3
	Bacillus subtilis	70		38.9	0.0		0.0	0.0		0.0	0.0		0.0
	Bacillus sp.	60		33.3	80		40	90		45	60		28.6
20	*Staphylococcus xyloseu*	0.0	100	0.0	5	105	4.8	0.0	100	0.0	0.0	110	0.0
	Bacillus subtilis	40		40	60		57.2	35		35	40		36.36
	Bacillus badius	40		40	0.0		0.0	0.0		0.0	30		27.27
	Bacillus brevis	0.0		0.0	40		38	35		35	20		18.18
	Bacillus sp.	20		20	0.0		0.0	30		30	20		18.18
40	*Bacillus subtilis*	50	130	38.5	55	135	40.7	40	150	26.66	60	160	37.5
	Bacillus badius	40		30.7	50		37	40		26.66	50		31.25
	Bacillus brevis	20		15.4	20		17	40		26.66	35		21.87
	Bacillus polymyxa	20		15.4	10		7	30		20	0.0		0.0
	Bacillus sp.	0.0		0.0	0.0		0.0	0.0		0.0	15		9.37
80	*Bacillus subtilis*	70	250	28	80	260	30.8	90	300	30	80	300	26.7
	Bacillus badius	50		20	80		30.8	80		26.7	80		26.7
	Bacillus brevis	40		16	50		19.2	60		20	70		23.3
	Bacillus polymyxa	50		20	10		3.8	40		13.3	30		10
	Bacillus sp.	0.0		0.0	0.0		0.0	0.0		0.0	10		3.3
	Klebsiella pneumoniae	40		16	40		15.4	30		10	30		10

Table 2: Colonization of thermophilic bacteria in different compost heaps at different composting periods. Data are expressed as the mean number of colony / agar plate of five replicates.

Comp. periods (days)	*Bacterial sp.*	*Comp. A*			*Comp. B*			*Comp. C*			*Comp. D*		
		No.of colony	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*	*No.of colony*	Total	Freq. %
0	*Bacillus sp.*	50	85	58.8	87	87	100	80	80	100	90	90	100
	Thermus sp.	35		41.2	0.0		0.0	0.0		0.0	0.0		0.0
3	*B. stearothermophilus*	50	120	41.7	70	140	50	75	147	51	80	150	53.3
	Peseudomonas sp.	30		25	0.0		0.0	0.0		0.0	0.0		0.0
	Bacillus sp.	40		33.3	70		50	72		49	70		46.7
20	*B. stearothermophilus*	70	240	29.2	80	200	40	80	210	38.1	90	230	39.1
	Thermus sp.	50		20.8	60		30	70		33.3	70		30.4
	Bacillus sp.	40		16.7	50		25	50		23.8	40		17.4
	Peseudomonas sp.	80		33.3	10		5	10		4.8	30		13.1
40	*B. stearothermophilus*	100	150	66.7	80	140	57.1	70	150	46.7	70	150	40.7
	Thermus sp.	50		33.3	60		24.9	40		26.7	50		33.3
	Bacillus sp.	0.0		0.0	0.0		0.0	40		26.6	30		20
80	*B. stearothermophilus*	50	60	82.4	40	75	53.3	25	30	83.4	28	35	80
	Thermus sp.	10		16.6	35		46.7	5		16.6	7		20

Table 3: Colonization of mesophilic fungi in different compost heaps at different composting periods. Data are expressed as the mean number of colony / agar plate of five replicates.

Comp. periods (days)	Bacterial sp.	Comp. A			Comp. B			Comp. C			Comp. D		
		No.of colony	Total	Freq. %	No.of colony	Total	Freq. %	No.of colony	Total	Freq. %	No.of colony	Total	Freq. %
0	*Fusarium moniliforme*	3	20	15	4	25	16	3	25	12	3	25	12
	Aspergillus niger	3		15	2		8	2		8	3		12
	Fusarium oxysporum	3		15	2		8	2		8	2		8
	Rhizopus nigricans	5		25	7		28	10		40	12		32
	Aspergillus sp.	3		15	3		12	4		16	3		12
	Fusarium sp.	2		10	2		8	3		12	1		4
	Penicillium citrinum	1		5	5		20	1		4	1		4
3	*Rhizopus nigricans*	7	17	41.2	10	20	50	9	21	38.1	10	20	50
	Aspergillus niger	7		41.2	4		20	8		42.3	5		25
	Fusarium sp.	1		5.9	0		0	0		0	4		20
	Penicillium citrinum	1		5.9	4		20	3		14.3	0		0
	Aspergillus flavus	0		0	0		0	2		9.5	0		0
	Fusarium oxysporum	1		5.9	2		10	0		0	1		4
20	*Rhizopus nigricans*	5	13	38.5	7	15	46.7	8	17	47.1	8	15	53.3
	Aspergillus flavus	4		30.8	6		40	3		17.6	0		0
	Aspergillus niger	0		0	0		0	6		35.4	3		20
	Fusarium sp.	4		30.7	0		0	0		0	0		0
	Penicillium sp.	0		0	2		13.3	0		0	4		26.7
40	*Rhizopus nigricans*	7	18	38.9	10	22	45.5	4	20	20	8	24	33
	Penicillium citrinum	5		27.8	6		27.3	6		30	6		25
	Trichoderma ressei	6		33.3	6		27.3	8		40	10		41
	Aspergillus flavus	0		0	0		0	2		10	0		0
80	*Rhizopus nigricans*	7	30	23.3	6	33	18.2	8	33	24.2	9	32	28.1
	Aspergillus flavus	5		16.7	5		15.2	0		0	1		3.2
	Penicillium citrinum	6		20	0		0	0		0	2		6.3
	Trichoderma ressei	6		20	8		24.3	10		30.3	10		31.3
	Trichoderma viride	6		20	8		24.2	8		24.2	10		31.3
	Penicillium sp.	0		0	6		18.2	5		15.2	0		0

Table 4: Colonization of thermophilic fungi in different compost heaps at different composting periods. Data are expressed as the mean number of colony /agar plate of five replicates.

Comp. periods (days)	Bacterial sp.	Comp. A			Comp. B			Comp. C			Comp. D		
		No.of colony	Total	Freq. %	No.of colony	Total	Freq. %	No.of colony	Total	Freq. %	No.of colony	Total	Freq. %
0	*Aspergillus sp.*	2	5	40	2	6	33.3	3	7	42.9	1	9	11.2
	Thermomyces sp.	0.0		0.0	0.0		0.0	4		59,1	4		44.4
	Talaromyces sp.	0.0		0.0	4		66.7	0.0		0.0	4		44.4
	Humicola sp.	3		60	0.0		0.0	0.0		0.0	0.0		0.0
3	*Aspergillus sp.*	3	12	25	0.0	15	0.0	0.0	15	0.0	0.0	15	0.0
	Aspergillus fumigatus.	6		50	5		33.3	10		67	8		53.33
	Talaromyces sp.	3		25	5		33.3	5		33	4		26.6
	Humicola sp.	0.0		0.0	5		33.4	0.0		0.0	0.0		0.0
	Thermomyces sp.	0.0		0.0	0.0		0.0	0.0		0.0	3		20
20	*Aspergillus fumigatus.*	10	20	50	8	23	34.8	10	25	40	11	27	40.8
	Talaromyces sp.	1		5	0.0		0.0	0.0		0.0	0.0		0.0
	A. fumigates var.elpticus	7		35	8		34.8	10		40	11		40.8
	Thermomyces sp.	2		10	3		13.8	0.0		0.0	0.0		0.0
	Talaromyces thermophilus	0.0		0.0	4		17.4	5		20	5		18.4
40	*Aspergillus fumigatus*	7	10	70	7	11	63.3	10	100	46.7	9	12	78
	A. fumigates var.elpticus	3		30	4		36.7	0.0	0.0	26.7	0.0		0.0
	Talaromyces thermophilus	0.0		0.0	0.0		0.0	0.0	0.0	26.6	3		22
80	*Aspergillus fumigatus*	1	1	100	1	1	100	3	3	100	4	4	100

Table 5: Colonization of mesophilic actinomycetes of different compost heaps at different composting periods. Data are expressed as the mean number of colony / agar plate of five replicates.

Comp. periods (days)	Bacterial sp.	Comp. A			Comp. B			Comp. C			Comp. D		
		No.of colony	Total	Freq. %	No.of colony	Total	Freq. %	No.of colony	Total	Freq. %	No.of colony	Total	Freq. %
0	*Streptomyces antibioticus*	15	50	30	18	52	34.6	20	55	36.4	22	58	37.9
	Streptomyces cinnaborinus	15		30	12		23.1	0.0		0.0	0.0		0.0
	Streptomyces roseus	10		20	12		23.1	13		23.6	18		31.1
	Streptomyces griseus	10		20	10		19.2	10		21.8	0.0		0.0
	Streptomyces sp.	0.0		0.0	0.0		0.0	12		18.2	18		31
3	*Streptomyces antibioticus*	25	60	41.7	30	70	42.8	32	70	45.7	25	85	24.4
	Streptomyces roseus	25		41.7	20		28.6	22		31.4	22		25.8
	Streptomyces cinnaborinus	10		16.6	20		28.6	16		22.9	18		21.1
	Streptomyces griseus	0.0		0.0	0.0		0.0	0.0		0.0	20		23.6
20	*Streptomyces antibioticus*	8	22	36.4	15	30	50	17	32	53.1	18	33	54.5
	Streptomyces roseus	7		31.8	10		33.3	10		31.3	12		36.4
	Streptomyces cinnaborinus	7		31.8	5		16.7	5		15.6	0.0		0.0
	Streptomyces sp.	0.0		0.0	0.0		0.0	0.0		0.0	3		9.1
40	*Streptomyces antibioticus*	20	65	30.7	25	65	38.5	30	70	42.9	25	75	33.3
	Streptomyces aureofciens	15		23.1	0.0		0.0	0.0		0.0	0.0		0.0
	Streptomyces roseus	15		23.1	20		30.8	11		15.7	20		26.7
	Streptomyces cinnaborinus	15		23.1	15		23.1	22		31.4	20		26.7
	Streptomyces griseus	0.0		0.0	5		7.6	7		10	8		10.7
	Streptomyces sp.	0.0		0.0	0.0		0.0	0.0		0.0	2		2.8
80	*Streptomyces antibioticus*	26	90	28.8	30	100	30	33	110	30	25	110	31.8
	Streptomyces aureofciens	20		22.2	25		25	26		23.6	30		24.4
	Streptomyces roseus	14		15.5	15		15	17		15.5	0.0		0.0
	Streptomyces cinnaborinus	14		15.5	13		13	15		13.6	18		16.4
	Streptomyces griseus	12		13.3	7		7	10		9.1	18		16.4
	Streptomyces sp.	4		4.4	10		10	9		8.2	9		8.1

Table 6: Colonization of thermophilic actinomycetes of different compost heaps at different composting periods. Data are expressed as the mean number of colony / agar plate of five replicates.

Comp. periods (days)	*Bacterial sp.*	*Comp. A*			*Comp. B*			*Comp. C*			*Comp. D*		
		No.of colony	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*	*No.of colony*	*Total*	*Freq. %*
0	Thermo dichotomicus	7	8	87.5	8	10	80	9	12	75	10	12	83.4
	Thermactinomyces sp.	1		12.5	2		20	3		25	2		16.6
3	Thermo dichotomicus	10	10	100	9	12	75	10	13	76.9	12	15	80
	Thermactinomyces sp.	0.0		0.0	3		25	3		23.1	3		20
20	Thermo dichotomicus	20	50	40	25	52	48.2	25	55	45.5	27	55	49.1
	Thermo vulgaris	20		40	18		34.6	25		45.4	25		45.5
	Thermo sp.	10		20	7		13.2	5		9.1	3		5.5
40	Thermo dichotomicus	20	40	50	27	42	64.3	22	40	55	22	42	52
	Thermo vulgaris	20		50	10		23.8	18		45	20		48
	Thermo sp.	0.0		0.0	5		11.9	0.0		0.0	0.0		
80	Thermo dichotomicus	10	20	50	10	20	50	13	23	56.5	12	23	52.2
	Thermo vulgaris	10		50	10		50	10		43.5	11		47.8