

Diversity, abundance and impact of pollinators in *Litchi chinensis* production

Pooja Kumari¹, Shagun Rana¹, Bhavya Bhargava^{2,3} and S.G. Eswara Reddy^{1,3 *}

¹. Entomology Laboratory, Agrotechnology Division, CSIR-Institute of Himalayan Bioresource Technology, Palampur-176061, Himachal Pradesh, India

² Floriculture Laboratory, Agrotechnology Division, CSIR-Institute of Himalayan Bioresource Technology, Palampur-176061, Himachal Pradesh, India

³ Academy of Scientific and Innovative Research (AcSIR), Ghaziabad-201002, India

*Correspondence: reddy@ihbt.res.in, reddy2001@yahoo.com, sgerddy73@gmail.com

Table S1. Shannon-Wiener diversity index of insect visitors of litchi flowers

Order	Species (No.)	Total (No.)	Diversity index ⁺
Hymenoptera	16	1137	0.34
Diptera	19	511	0.33
Lepidoptera	33	493	0.34
Coleoptera	9	91	0.13
Total	75	2232	1.15

Diversity scale: *Low diversity (<1.5), Medium diversity (>1.5) and High diversity (>2.5)

Table S2. t-Test: Two-Sample Assuming Equal Variances

		Field 1	Field 2		
	Order	Mean	Mean	t value	p-value
Morning	Hymenoptera	29.7	34.4	-1.31	0.21
	Lepidoptera	12.9	13.2	-0.10	0.92
	Diptera	14.4	18.1	-1.56	0.14
	Coleoptera	2.1	2.9	-1.27	0.22
Evening	Hymenoptera	20.2	29.4	-1.64	0.12
	Lepidoptera	12	11.2	0.22	0.83
	Diptera	10.5	8.1	0.86	0.40
	Coleoptera	2.3	2.6	-0.33	0.75

Field 1 -Natural pollination; Field 2-Natural pollination and *A. mellifera* colony

Table S3. Effect of varied mode of pollination on litchi yield

Treatments	Fruit weight (g) (Mean ± SE)	Fruit set (%) (Mean ± SE)
Caged tree with <i>A. mellifera</i> colony	1.42 ± 0.13 ab	21.93 ± 1.24 ab
Natural pollination alone	1.34 ± 0.31 ab	22.01 ± 2.27 ab
Natural pollination with <i>A. mellifera</i>	1.60 ± 0.11 a	23.24 ± 1.40 a
Excluding insect pollinators	0.00 ± 0.00	0.00 ± 0.00
C.D. (P=0.05)	0.50	3.61
C.V (%)	28.16	1.11
S.E (m) ±	0.15	1.11

Means followed by same letters within a column are not statistically different; SE-Standard error