

LIST OF PUBLICATIONS

Research papers:

S. P. Saikia, S Mapeli, D. Breviario, I. Galasso, S. Giani, L. Braglia, P. Pecchia, **A. Gogoi** and K.D. Mudoi; Comparative studies for selection of *Jatropha curcas* L. capable of high yield and oil quality in Assam environment; *Current Science* (2015); **109 (3):** 552-566.

R. Kotoky, A. Rabha, **A. Gogoi**, S. C. Nath and S. P. Saikia; Correlation studies in seed traits, moisture and oil content and effect of hormones on flowering of *Jatropha curcas* L.; *Brazilian Journal of Biological Sciences* (2015); **2(3):** 79-84.

S. P. Saikia, S. Mapelli, P. Pecchia, K. D. Mudoi and **A. Gogoi** (2015); Variability of Growth and Oil Characteristics of *Jatropha curcas* L. in Northeast India; *Current Science*. (In communication)

Publications

Abstracts:

S. Mapeli, S.P. Saikia, P. Pechia, K. Dutta Mudoi and **A. Gogoi**; Comparative studies for selection of *J. curcas* L. capable of high yield and oil quality in Assam environment; Abstract: 10th Euro Fed Lipid Congress on “Fats, Oil and Lipids: From science and technology to health” held at Poland on 23rd-26th September, 2012.

A. Gogoi, S.P. Saikia, K. Dutta Mudoi and P.R. Bhattacharyya; **Comparative evaluation of physicochemical properties of *J. curcas* L. for high oil yield and adaptability in Assam environment**; **Abstract:** International Conference on “Harnessing natural Resources for Sustainable Development- Global Trend”; organized by Cotton College from 29th-31st January, 2014.

A. Gogoi, K. Dutta Mudoi, R.K. Sharma and S.P. Saikia; **Non-food oilseed plants as the alternative resource for biodiesel production**; **Abstract:** National seminar on “Science, Technology and Their Impact on Society with Special Reference to North-East India” organized by Jorhat College on 29th and 30th August, 2014.

Book Chapters:

Publications

S. P. Saikia, S. Mapelli, P. Pecchia, K. D. Mudoï and **A. Gogoi** (2013); Non-food oilseed plant as an alternative resource for biofuel production; *Climate Change and Himalaya- Natural Hazards and Mountain Resources* (**Scientific Publishers, India**); pp. 94-117.

S. P. Saikia, **A. Gogoi**, K. D. Mudoï, A. Goswami and D. Bora (2012). Assessment of the Potential of *Jatropha curcas* for Energy Production and Other Uses. In: *Jatropha, Challenges for a New Energy Crop: Volume 1: Farming, Economics and Biofuel* (**Springer Science, New York**); pp. 299-310.

Seminar or Conferences Attended:

International Conference on “Harnessing natural Resources for Sustainable Development- Global Trend”; organized by Cotton College from 29th-31st January, 2014.

National seminar on “Science, Technology and Their Impact on Society with Special Reference to North-East India” organized by Jorhat College on 29th and 30th August, 2014.

**Geographical Location and General Climatic Feature
of
Jorhat, Assam, India**

Publications

Jorhat is located at an altitude of 91.0 meters above the sea level which falls between 26°44' North and 94°10' East. The locality being situated in the monsoon sub-tropical zone is characterized by hot and wet summer and dry to cool winter. The soils of Jorhat are mostly alluvial with sandy loam texture and pH varies from 4.8 to 5.8. Based on temperature, rainfall and humidity prevailing throughout the year in the locality, four distinct seasons can be identified: **(a)** Pre-monsoon season (*March-May*): characterized by gradual rise in temperature, vanishing fog and occasionally becomes strong causing dust storm; **(b)** Monsoon season (*June-August*): characterized by cloudy weather, heavy rainfall, high humidity and weak variable surface wind with rising temperature, August is the warmest month in the year; **(c)** Post-monsoon season (*September-November*): characterized by fair weather with fall of temperature and scanty rainfall and **(d)** Winter season (*December-February*): characterized by fall of temperature and scanty rainfall with occasional cool breeze from the North and morning fog.

The climate of Jorhat is characterized by much rainfall, i.e., more than 2000 mm per annum and high average humidity of around 80%. The maximum temperature rises up to 37.7°C in the month of June-July, while the minimum temperature drops down to 5.5°C in the month of December and January. The average daily sunshine hours recorded is 5.7 hrs.

Meteorological data at Jorhat, Assam, India from 2012 to 2014

Year	Month	Temperature (°C)		Relative Humidity (%)		Rainfall (mm)	
		Min.	Max.	Min.	Max.	Min.	Max.
2012	January	6.8	24.2	66.0	99.0	1.5	4.9
	February	6.8	28.7	72.4	88.0	2.5	600.5
	March	11.3	32.0	32.0	100.0	1.5	14.5
	April	16.1	34.5	80.2	100.0	0.5	83.0
	May	18.9	36.9	86.0	95.3	5.0	187.0
	June	23.2	35.9	72.0	100.0	1.0	7.5
	July	24.6	35.9	92.5	99.0	0.0	0.0
	August	24.3	36.5	84.2	99.0	13.0	124.0
	September	23.3	36.8	88.2	99.0	5.0	120.0
	October	25.2	33.3	79.5	100.0	0.0	0.0

Publications

	November	16.0	35.9	76.5	91.2	0.0	0.0
	December	5.5	27.6	71.5	90.0	0.0	0.0
2013	January	5.9	27.7	70.0	99.0	0.0	0.0
	February	6.9	31.8	53.6	80.7	0.5	4.0
	March	18.0	33.8	65.0	83.5	0.0	0.0
	April	19.3	34.2	36.6	99.0	3.0	49.0
	May	21.0	36.5	79.5	90.5	3.0	63.0
	June	26.3	37.7	76.0	90.0	0.0	9.0
	July	25.7	35.5	71.0	100.0	3.0	7.0
	August	24.0	36.8	42.0	99.0	12.0	189.0
	September	23.9	36.7	72.0	96.0	2.0	40.0
	October	20.7	33.3	58.0	99.0	4.0	49.0
	November	13.4	29.0	50.0	99.0	0.0	0.0
	December	9.7	28.1	58.0	99.0	0.0	0.0
2014	January	9.9	23.3	54.2	99.0	0.0	2.0
	February	12.2	24.2	53.2	99.0	0.0	3.5
	March	15.9	28.2	47.4	99.0	0.0	2.5
	April	19.4	31.5	47.0	99.0	0.0	2.5
	May	22.2	29.2	70.6	99.0	0.0	12.5
	June	24.8	31.6	70.3	98.7	0.0	75.5
	July	25.1	31.6	72.2	99.0	0.0	44.0
	August	24.5	30.5	78.0	99.0	0.0	14.5
	September	24.7	30.6	75.7	98.6	0.0	26.5
	October	22.2	30.6	63.3	96.7	0.0	23.0
	November	16.9	27.7	57.8	97.7	0.0	0.0
	December	11.3	24.8	51.4	98.3	0.0	0.0