

An announcement to recruit **two unpaid interns** at Center for Studies in Ethnobiology, Biodiversity, and Sustainability (CEiBa), <https://ceibatrust.org>

- 1. An analysis of key rice domestication genes**
- 2. An analysis of water stress related genes in *indica* and *aus* rice**

Domestication of crops allowed humans to ensure predicted resource base and food security that had cascading impact on human bio-cultural evolution. On the one hand, the crop plant has undergone remarkable change while this process [domestication syndrome trait]. On the other hand, it unleashed an enormous diversity to adapt diverse local agro-ecological condition followed by human selection [crop evolution]. We seek to have a finer understanding of domestication and diversification employing rice as a model system.

Primarily, both the projects would require analysis and interpretation of selected genes of interest in a population genetics framework to uncover diversity pattern, selection, and their implication to domestication and stress. The candidate(s) would search databases, articles, and web-resources to compile and collate data, analyze them, and assist in drafting the ms.

Requirement:

1. A masters student (especially those who is looking for PhD opportunities and can make use of the gap to get some experience and secure a publication prior to PhD).
2. Keen interest to learn and implement.
3. Basic skills in molecular data analyses.
4. A commitment for six months or till the completion of work sufficient for a publication, which is one earlier.

Benefits:

1. Work at one's convenience, no need to relocate.
2. Regular email update of the progress and Skype meeting on weekly basis.
3. An authorship in potential papers upon performing sufficient amount of work.
4. These are fairly mature projects so a high chance of getting papers sooner.

To apply, please email your cover letter with CV (with relevant education and experience) with subject line 'intern_rice project' by 15th March, 2020 to

Dr. Avik Ray
avikray@ceibatrust.org

A couple of related publications for background reading:

1. Serge Svizzero, Avik Ray, Debarati Chakraborty. Awn Reduction and the Domestication of Asian Rice: A Syndrome or Crop Improvement Trait? *Economic Botany*, pp.1-12. <https://doi.org/10.1007/s12231-019-09465-0>

2. Chakraborty, D. and Ray Avik. 2019. Population genetics analyses of North-East Indian indigenous rice landraces revealed divergent history and alternate origin of aroma in aus group. *Plant Genetic Resources*, pp.1-11.
3. Peter Civián, Sajid Ali, Riza Batista-Navarro, Konstantina Drosou, Chioma Ihejieto, Debarati Chakraborty, Avik Ray, Pierre Gladioux, Terence A Brown. 2019. Origin of the aromatic group of cultivated rice (*Oryza sativa* L.) traced to the Indian subcontinent. *Genome Biology and Evolution*, evz039, <https://doi.org/10.1093/gbe/evz039>
4. Avik Ray and Debarati Chakraborty. 2018. Shattering or not shattering: that is the question in domestication of rice (*Oryza sativa* L.). *Genetic Resources and Crop Evolution* 65(2): 391-395.

And more can be found at

<https://www.researchgate.net/project/The-origin-of-agriculture-and-uncovering-the-history-of-crop-domestication>