**Korea FAO Association collaboration with ICBA**

**ToR of intern**

**Number required: one intern**

**Period: six months – remotely**

**Subject:** In silico analysis of quinoa genomes for key agronomic traits

The minimum eligibility should be M.S. degree in Bioinformatics with at least 1 year experience in in-silico analysis**.**

**Assignments**

1. Genome assembly of quinoa genomes from different quinoa genotypes.
2. *In silico* analysis for SSR identification in quinoa genome and transcriptome.
3. Literature survey and identification key genes contributing in major agronomic traits in field crops.
4. Identifying the orthologs in quinoa to domestication genes in established crops.

**Time Frame for implementing tasks**

|  |  |
| --- | --- |
| **Duration** | **Tasks** |
| 1 month | Genome assembly of quinoa genomes from different quinoa genotypes |
| 15 days | *In silico* analysis for SSR identification in quinoa genome and transcriptome. |
| 2 months | Literature survey and identification key genes contributing in major agronomic traits in field crops. |
| 2 months | Identifying the orthologs in quinoa to domestication genes in established crops |
| 15 days | Data compilation and result writing. |