

## Population status of *Aquilaria malaccensis* Lam.: A critically endangered tree species of India in Assamese homegardens

P Saikia

Central University of Jharkhand, India

*Aquilaria malaccensis* Lam. popularly known as Sanchi or Agar in Assamese is a tropical forest tree with great economic value. Because of the indiscriminate harvesting from natural forests, the species is included in Appendix II of CITES to bring the international trade under sustainable level. The species is Vulnerable worldwide, Critically Endangered in India and almost Extinct in Wild in Assam. There are two distinct morphs of *A. malaccensis* viz. Jati Sanchi and Bhola Sanchi cultivated in Assamese homegardens. An attempt has been made to study the population status of both the variants in 37 randomly selected homegardens of Golaghat and Jorhat districts of Assam. It was studied by quadrat method and were grouped into seedling ( $\leq 20$ cm height), sapling ( $> 20$ cm height and  $\leq 30$ cm GBH) and tree ( $> 30$ cm GBH) for analyses of population status. Since the individuals of seedling and sapling encountered in the homegardes for both the variant could not be identified, it has been grouped together for both the variant. Population density (individuals  $\text{ha}^{-1}$ ) of trees of Jati Sanchi and Bhula Sanchi was 430 and 8 respectively, it was 6,916 for saplings and 25,568 for seedlings. Tree density (individuals  $\text{ha}^{-1}$ ) of both Jati Sanchi and Bhula Sanchi varied among different homegardens and ranged from 33 to 1263 (mean  $445 \pm 56$ ) for Jati Sanchi and 0 to 150 (mean  $8 \pm 4$ ) for Bhula Sanchi. Overall study showed good regeneration status (seedling  $>$  sapling  $>$  tree) of *A. malaccensis* in homegardens of upper Assam. As a result of small scale cultivation in homegardens, population has been increased by many folds thereby helps in conservation of a species from the verge of extinction.

### Biography

P. Saikia has completed her Ph. D. at the age of 27 years from NERIST (Deemed University), Arunachal Pradesh and pursuing Postdoctoral studies from Tezpur University, Assam. She has published nine papers in reputed international journals and two papers in proceedings of national seminar.

purabi.saikia83@gmail.com