Dantewada district, a part of the Bastar zone, is one of the most backward districts of Chhattisgarh. Most of the people in this district belong to tribal communities. Their major sources of income are farming and collection and selling of minor forest-based products. Major crops are rice and finger millet, but due to the lack of irrigation facilities, agriculture depends entirely on the monsoon leading to poor productivity of crops. Collection and selling of minor forest based produce; especially Chironji (one of the important multipurpose forest species) brings income to the local inhabitants. Chironji (Buchnania lanzan Spreng syn. B. latifolia Roxb), also known as Char, Piyal or Achar belongs to the family Anacardiaceae. It is a subtropical, underutilized/underexploited nut fruit and is considered to be native to India.

This multipurpose tree provides food, fuel, fodder, timber and medicine to the local community. It is a popular and edible nut fruit, eaten raw or roasted and also used in making dessert. During summer when green fodder becomes unavailable, local inhabitants use its leaf as green fodder for their animals, especially buffalo, goat and sheep. Its dried wood is utilized as a fuel. The timber of Chironji is slightly resistant to termite and is utilized for making furniture, boxes and crates, desks, fine furniture, match boxes, mill work, moulding, packing cases, stools, tables and agricultural implements. Some parts of the plant are also used to cure diseases, for instance roots in diarrhoea, leaves for skin diseases and healing wounds, gum/resins in diarrhoea, and fruits in asthma and cough. Locals also earn money by collecting gum/resins and lac by rearing kussumi strain of lac on the chironji tree. The nutritional value and physico-chemical properties of Chironji are given in Table 1.

Problem identified and future research area:

At present the plant is grouped as an underexploited and non-nationalized minor forest produce. It is free for collection, as a result of which the local inhabitants, traders and greedy merchants destroy the branches/whole trees during collection of its fruits without bothering about new plantations. This has led to the destruction of Chironji plants in the forests. The seed germination studies were conducted in the nursery of Krishi Vigyan Kendra, Dantewada. For studies on plant survival and growth, fresh seeds of B. lanzan were planted in the field in silty-loam soil. Seed germination of 75 per cent within 20 days could be achieved with satisfactory seedling growth by mechanically damaging the stony endocarp with hammer before sowing followed by seed treatment with 5 per cent H₂SO₄ that is 61.5 per cent within 25 days and only 39 per cent germination were recorded in seed sown normally.

KEY WORDS: Chironji, Germination, Non-timber forest produce, Propagation

The biometric observations were recorded on germination percentage, days taken for germination, plant height (cm) one month after germination, plant survival (90.00 %) one month after germination, which was statistically superior and showed significant difference from rest of the treatments (Table 2). The treatment mechanically rupturing of seed coat by hammer recorded the increased percentage of germination, plant height and survival percentage (91.08 %, 33.4% and 13.2 %, respectively) over the control (sowing of seeds without treatment). The control treatment recorded the lowest germination (39.25 %), plant height (2.30 cm), plant survival (79.50 %) one month after germination and taken longest days (29.25) for the germination of seed.

Shukla and Solanki (2000) also recorded the seed germination of 83 per cent within 18 days with satisfactory seedling growth by mechanically damaging the seed coat with hammer before sowing of seed. Centre of Forest Research and Human Resource Development, Chhindwara (Annual Report, 2005-06) also reported that the seed of Buchanania Lanzan treated mechanically by hammer gave better germination and seedling growth.

**REFERENCES**


