NIGER (GUIZOTIA ABYSSINICA CASS.): A HIGH QUALITY OILSEED CROP FOR TRIBAL & HILLY AREAS OF INDIA

P. K. Jagtap*, P.B. Sandipan and M.C. Patel

Niger Research Station, N.A.U., Vanarasi-396580 (Gujarat) Email: pacific7@rediffmail.com

Abstracts: Niger is the most important oilseed crop in Ethiopia and a minor crop in India that has been cultivated for approximately 5000 years which is not involved in the world wide oilseed trade. India is considered to be the chief niger producing country in the world with an area of 5 lakh hectares. It is cultivated mainly in the states of Orissa, Maharashtra, Madhya Pradesh, Bihar, Karnataka and Andhra Pradesh and to some extent in hilly areas of Rajasthan, Uttar Pradesh, Gujarat, Tamilnadu, Assam, and also in some parts of North Eastern Hills states of the Country. Niger seed belongs to the same botanical family as sunflower and safflower (*Compositae*). There are six species of *Guizotia* with *G. abyssinica* being the only the cultivated species It is a dicotyledonous herb, moderately to well branched, and grows up to 2 meter in height. The crop grows best on poorly drained, heavy clay soils without much more irrigation.

Keywords: Tribal, oil, health, fatty acid, Niger

REFERENCES

Bhardwaj, S.P. and Gupta, R.K. (1977). Tilangi, a potential rich yielding oil seed crop. *Indian Farming.* **27**: 18–19.

Charnock, J.S., Sundram, K., Abeywardena, M.Y., McLennan, P.L., and Tan, D.T. (1991). Dietary fats and oils in cardiac arrhythmia in rats. *Am. J. Clin.Nutr.* 53: 1047S–1049S.

Getinet, A. and Sharma, S.M. (1996). Niger. *Guizotia abyssinica* (L. f.) Cass.Promoting the conservation and use of underutilized and neglected crops. 5. Institute of Plant Genetics and Crop Plant Research, Gatersleben/International Plant Genetic Resources Institute, Rome.

Getinet, A. and Teklewold, A. (1995). An agronomic and seed-quality evaluation of niger (*Guizotia abyssinica* Cass.) germplasm grown in Ethiopia. *Plant Breed.* **114**: 375–376.

Nasirullah, M.T., Rajalakshmi, S., Pashupathi, K.S., Ankaiah, K.N., Vibhakar, S., Krishna

Murthy, M.N., Nagaraja, K.V., and Kapur, O.P. (1982). Studies on niger (*Guizotia abcyssinica*) seed oil. *J. Food Sci. Technol.* **19**: 147–149.

Paliwal, D.K. and H.S. Randhawa. (1978). Evaluation of a simplified *Guizotia abyssinica* seed medium for differentiation of *Cryptococcus neoformans. J. Clinical Microbiol.* **7:**346-348.

Patil, H.S. and Duhoon, S.S. (2006). Self incompatibility, male sterility and pollination mechanism in niger (*Guizotia abyssinica* (L.F.) Cass.) *Agric. Rev.* **27**(2): 113-121.

Rajpurohit, T.S. (2011). Diseases of niger and rheir management. *Plant Science Feed*. **1**(2): 19-22.

Ramdan, M.F. (2012). Functional Properties, Nutritional Value, and Industrial applications of Niger Oilseeds (*Guizotia abyssinica* Cass.) Critical Reviews in Food Science and Nutrition, **52**:1–8

Seegeler, C.J.P. (1983). Oil plants. In: Ethiopia: Their Taxonomy and AgriculturalSignificance. pp. 122–146. Center for Agricultural Publishing and Documentation, Wageningen, The Netherlands.