

Kola nut: so much more than just a nut

Dawn Starin

University College London, London WC1H0BW, UK

Corresponding author: Dawn Starin. Email: e.starin@ucl.ac.uk

Day after day, month after month, the labourers, sweating from the heat, tired from their grueling, monotonous work and hungry from not having eaten enough, chew on pieces of bitter, astringent kola nuts. Kola helps get them through their day in this small Gambian forest on the edge of West Africa. Sometimes they bring the nuts to work with them. Sometimes a local woman comes and sells them nuts while they sit in the shade of a large mampato tree. However they get them, they always have them.

Outside the forest on the bantaba, a raised platform made from wooden planks, the village men often sit chewing pieces of kola nuts while they exchange gossip, argue over football scores and discuss politics – both national and familial – while swatting away the ever-present mosquitoes and tsetse flies. The women, with infants strapped to their backs and heavy loads piled on their heads, put down their bundles and buckets and rest for a bit, but only a bit. Like the kola-chewing men, they too take part in this shared masticatory activity.

Sitting on the veranda of his house, a village elder accepts a kola nut from a local farmer who wants his approval on a financial dispute he is having with a neighbour.

An office worker having problems with his boss decides to visit a marabout, a combination of priest, sage, mystic, prophet and healer, for a ‘special juju to make his boss stop giving him a hard time’. Carrying a chicken and some kola nuts as offerings, he goes to seek advice and help.

A used-to-be-animist, now-Christian, says he has no need for stick Gods and jujus. He says ‘My church is my juju, but if I want to have especially good luck I will bring a kola nut to a fair-coloured old man or old woman who will say many “Amens” for me and I will get my luck’.

Kola is prized throughout West Africa by the poor and the affluent; by men and women; by Muslims, Christians and animists. It is a shared experience, a powerful cultural symbol. It is given to show respect and as a sacred offering. It is a crucial part of

community meetings. It is incorporated into many rites of passage and into ceremonies to cement treaties and contracts. In Nigeria, it is even believed that the prophet Muhammad relished kola nuts and gave them as gifts¹ and that his wealthier followers gave kola as alms during high festivals.²

Everywhere I went I saw kola being farmed, transported, traded, consumed or discussed. Every market, bus depot and corner shop has small piles of kola nuts for sale. In some areas of West Africa, kola is perhaps the second most important indigenous cash crop³ and is especially useful in alleviating poverty among rural people.⁴ In the past, kola was even used as currency and part payment for taxes.²

But, kola is so much more than a cultural symbol and a key market item in a struggling economy. People have claimed it ‘sweetens stale water’, treats fatigue, hunger pangs, infections, various skin diseases and ulcers, toothaches and sore gums, morning sickness, difficult labours, irregular menstrual cycles, colic and assorted intestinal diseases, headaches, depression, flagging libidos, severe coughs, asthma, various eye diseases, and both dysentery and constipation. Because it was believed that kola ‘combated cowardice’ and made men ‘eager for combat’ (R Prietze quoted in Lovejoy²), they were traditionally given to troops on African battlefields.¹

Native to West Africa, these culturally significant, economically important, chestnut-size nuts reputed to dispel all manner of illnesses, have travelled far and wide and their therapeutic reputation has travelled with them over centuries and across continents.

As long ago as the 12th century, an Arab physician recommended kola for the relief of various stomach complaints¹ and by the 16th century, it was incorporated into the *matière médicale* of Islamic science.² Slave traders carried kola nuts on their ships ‘as a medical prophylactic agent or as an ordinary article of food, to avert, as far as practicable, those attacks of constitutional despondency to which ... Negroes were peculiarly liable’ (Attfield quoted in Abaka¹).

In Victorian Britain 'kola chocolate', a preparation made from kola, sugar and vanilla, was dispensed to invalids and recommended to travellers to 'allay hunger and relieve exhaustion' while 'kola champagne' was advertised as a tonic and nerve stimulant.^{5,6} And, of course, kola extract is said to be partially responsible for two major multinational success stories. In 1886, it was used to create a 'brain tonic' known as Coca-Cola and a few years later, Pepsi-Cola was created and marketed as a medical tonic to relieve peptic ulcers and dyspepsia.⁷ In the late 1800s, an American doctor wrote about the therapeutic uses of fresh, undried kola nut (a 'most valuable drug') that many physicians used 'to sustain themselves through extra and long-continued work, and especially if their duties call for loss of sleep'. He also claimed that it cured some cases of whooping cough, asthma, melancholia, alcohol and morphine addiction, uterine inertia and surgical shock, and that it was 'serviceable' in Bright's disease, cardiac and renal dropsies, rheumatic and rheumatoid conditions, and in cases of shock with collapse and delirium tremens.⁸

While many of the claims made for kola are clearly exaggerated, or at least semi-distorted, some research has shown that kola nut extract contains the stimulants caffeine, theobromine and kolatin, and glucose, and is able to counteract fatigue, alleviate thirst and hunger, and possibly enhance intellectual activity, act as a psychoactive substance and suppress coughs.^{1,3,9-12}

By following the story of kola through the ages and across continents, it becomes clear that traditional practices sometimes demonstrate an extensive understanding of particular plants. Today millions upon millions of people ingest kola nut extract as one of the ingredients in products created by pharmaceutical, dietary and food and drink industries.

Kola is just one very small example of a very large problem: unbalanced international commercial ventures. The developed world has often gained by taking local resources and/or traditional knowledge and turning them into financial bonanzas, while the local people often garner little (if anything) in comparison. Is there a solution to this problem, one that is fair and equitable and subject to mutually agreed transparent terms?

While it is now too late for past and present local kola nut promoters and believers to financially benefit from their knowledge, in order to safeguard future local interests, legal frameworks need to be established, frameworks that acknowledge and incorporate local cultural mores and sensitivities. Also, prior informed consent as well as adequate compensation (in monetary or non-monetary terms) need to

be ensured if genetic resources and/or traditional knowledge associated with such resources are used by scientists or industries. Should misappropriation of these materials and/or knowledge occur, legal recourse must be available. Implementation of the *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization* (<http://www.cbd.int/abs/about/>) would be a step in the right direction. This international agreement, whose ratification and implementation is presently being discussed within the EU, has thus far been ratified by only 20 countries (apparently further ratifications will follow in the coming weeks). All 20 are potential provider countries, those on the potential supply end of this international equation, those at potential risk of exploitation.

Unfortunately, if this agreement is not enacted, it is possible that provider communities might have to pay high prices, without any compensation) to use something that has long been a part of their traditional heritage and/or they could prevent basic research from occurring. Quite simply, without this international agreement, prospects for the future for both local producers and consumers as well as potential beneficiaries in the larger international community remain at risk on fiscal, ethical and scientific research fronts.

Declarations

Competing interests: None declared

Funding: None declared

Ethical approval: Not applicable

Guarantor: DS

Contributorship: Sole author

Acknowledgements: N. Ali, T. Greiber, P. Lovejoy, C. McEver, S. Peña Moreno, F. Perron-Welch all provided valuable comments and information.

Provenance: Not commissioned; editorial review

References

1. Abaka E. Kola nut. In: Kiple KF and Ornelas KC (eds). *The Cambridge World History of Food*. UK: Cambridge University Press, 2000, pp.684-90.
2. Lovejoy PE. Kola nuts: the coffee of the central Sudan. In: Goodman J, Lovejoy PE and Sherratt A (eds). *Consuming Habits: Drugs in History and Anthropology*. Oxon: Routledge, 2007, pp.98-120.
3. Mokwunye FC. *Functional Characterisation of Kola Nut Powder for Beverage Production*. MSc dissertation. Abeokuta, Nigeria: University of Agriculture, 2009: 1-69.
4. Adebayo SA and Oladele OI. Medicinal values of kola nut in Nigeria: implication for extension service delivery. *Life Sci J* 2012; 9: 887-91.

5. Freeman RA. *A Journey to Bontuku in the Interior of West Africa*. Royal Geographical Society Supplementary Papers. Vol 3. London: Royal Geographical Society, 1892: 119–46.
6. Emmis C. Soft drinks. In: Kiple KF and Ornelas KC (eds). *The Cambridge World History of Food*. UK: Cambridge University Press, 2000, pp.702–11.
7. Louis JC and Yazijian H. *The Cola Wars*. New York: Everest House, 1980.
8. Yarbrough CC. Therapeutics of kola. *JAMA* 1899; 33: 1148–9.
9. Sundstrom GL. The Cola nut. Functions in West African social life. *Stud Ethnogr Upsa Liensia* 1966; 26: 135–46.
10. Nickalls RWD. W. F. Daniell (1817–1865) and the discovery that cola-nuts contain caffeine. *Pharm J* 1986; 236: 401–2.
11. Kennedy JG. *The Flower of Paradise. The Institutionalised Use of the Drug Qat in North Yemen*. Dordrecht, the Netherlands: D. Reidel Publishing Co., 1987.
12. Atanda OO, Olutayo A, Mokwunye FC, Oyebanji AO and Adegunwa MO. The quality of Nigerian kola nuts. *Afr J Food Sci* 2011; 5: 904–9.



Your Campaigns, Our Solutions.

SAGE publishes more than 500 highly regarded peer-reviewed journals covering a wide range of medical therapeutic areas and other professional disciplines.

We offer innovative and effective promotional opportunities to reach your target audience and key opinion leaders. Opportunities include:

- **Reprints**- individual and/or collated article reprints and digital e-Prints
- **Advertising**- both print and targeted online campaigns
- **Sponsored online projects**- Microsites, Webinars, Podcasts
- **Sponsored peer reviewed supplements**

For further information contact us

☎ +44 (0)20 7324 8400

✉ reprints@sagepub.co.uk
advertising@sagepub.co.uk

🌐 www.uk.sagepub.com/journals.nav

