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**Why herbal cure for Tuberculosis may come from Africa**

**Re: Olugbuyiro J.A.O**, Moody JO and Hamann MT (2009) AntiMtb activity of triterpenoid-rich fractions from *Spondias mombin* L *African Journal of Biotechnology* 8 (9): 1807-1809.

[| Print |](http://www.tribune.com.ng/index.php/natural-health/1162-why-herbal-cure-for-tuberculosis-may-come-from-africa?tmpl=component&print=1&page=)[E-mail](http://www.tribune.com.ng/index.php/component/mailto/?tmpl=component&link=aHR0cDovL3d3dy50cmlidW5lLmNvbS5uZy9pbmRleC5waHAvbmF0dXJhbC1oZWFsdGgvMTE2Mi13aHktaGVyYmFsLWN1cmUtZm9yLXR1YmVyY3Vsb3Npcy1tYXktY29tZS1mcm9tLWFmcmljYQ%3D%3D)

Written by Sade Oguntola Wednesday, 10 February 2010

A herb seller.

Can common African plants bring a lasting solution to increasing cases of tuberculosis (TB)?  This is a question scientists are looking into to see whether leaves used in the community to treat this disease are actually effective.

Tuberculosis and leprosy are the most common and most deadly infectious diseases caused by Mycobacterium tuberculosis and Mycobacterium leprae, respectively. Globally, an increased number of persons are contracting these germs that cause tuberculosis. Worldwide, about 1.6 billion are infected with tuberculosis and perhaps only 15 million end up with active TB disease at any given time.

Although susceptibility to developing the active TB disease may vary widely by country, age, race, sex, and socioeconomic status, however, its phenomenal increase is due to  weak immune system compromised by stress, immunosuppressive drugs, substance abuse, or HIV/AID. Meanwhile, the problem of multi-drug resistant strains of the germ causing TB has made the search for more efficacious, safer, cheaper, and more accessible drugs a priority.

The increasing cases of TB have, however, informed scientists investigating medicinal plants with folk reputation  as effective alternative therapies for treating TB. Two of such plants are Anthocleista djalonensis and Diospyros mespiliformis.

A.    djalonensis is a medium-sized flowering plant with grayish outer stem bark which is green below. Previous studies showed that the cold water and ethanol extract of the roots  may be effective against diseases caused by Saphylococcus aureus and  Escherichia coli, some of which abscess, boil, food poisoning and bladder infections.

The root decoction is also taken as a remedy for chest pains for constipation, dysentery, and other diseases that affect the stomach. Aqueous extracts of the leaves mixed with lemon juice is used by the Abros of Ghana to cure epilepsy.

D. mespiliformis commonly called African ebony or jackal tree is found growing in woodlands, savannas and along river banks. It has been shown to possess a number of medicinal uses; the leaves are used to treat fever, as wound dressings, and as an antidote for a variety of poisonous substances. The roots and bark are used to treat diseases such as malaria, syphilis, leprosy, and to stop purging. Its usefulness as a dewormer and insecticide has also been reported.

In an assessment of the effectiveness of these plants against TB-causing germs, Charles O. Esimone;  Chukwuemeka S. Nworu; Ebere B. Onuigbo; Justina U. Omeje; Kelechi L. Nsirim; Joy C. Ogbu;, Maria I. Ngwu;  Kennedy F. Chah; and  Ebere B. Onuigbo, all from the University of Nigeria, Nsuka,  declared that the  result of their study supported the claims of efficacy reported in the folk use of these plants in treatment of infections like TB, and that the plants could therefore be investigated further and harnessed as potent anti-TB  treatment.

In the report documented in a 2009 issue of the International Journal of Green Pharmacy, they declared that only the methanol extracts of A. djalonensis and D. mespiliformis were effective against the germs that cause TB, adding that its effectiveness was quite comparable to those of a standard anti-TB drug, isoniazide.

Since the use of combined anti-tuberculosis drugs is believed to be very crucial in overcoming the problems of multidrug resistant (MDR) strains of mycobacteria, their finding indicated that the combinations of the root extracts of the two plants at the ratio of 8:2 could be of possible clinical benefit in the treatment of tuberculosis infection.

Similarly, Spondias mombin, whose fruit is called iyeye in the Yoruba language, ngulungwu in Igbo and isada in Hausa, was suggested as possible candidate for developing new TB treatment by researchers. This was contained in a study carried out by Joseph A.O. Olugbuyiro from Covenant University, Ota and Jones O. Moody from the department of Pharmacognosy, University of Ibadan in collaboration with Mark T. Hamann from the National Centre for Natural Products Research, School of Pharmacy, The University of Mississippi, U.S.A.

They wrote: “Our multi-drug resistant TB screening of plant products from Nigeria resulted in S. mombin with a high potency in vitro (inside test tube) activity against mycobacterium tuberculosis. The results reveal S. mombin as a promising natural product agent that can provide useful anti- tuberculosis drugs.”

Spondias mombin is a tree widely cultivated and naturalized in tropical Africa. The fruit is golden-yellow, with thin, tough skin, and medium-yellow, clinging to the white, fibrous or “corky” stone. Ripe fruits are eaten out-of-hand, or stewed with sugar. The extracted juice is used to prepare ice cream, cool beverages and jellies. Young leaves are cooked as greens.

The fruit juice is drunk as a diuretic and febrifuge. The decoction of the astringent bark serves as an emetic, a remedy for diarrhea, dysentery, hemorrhoids and a treatment for gonorrhea and leucorrhea; and, in Mexico, it is believed to expel calcifications from the bladder. The powdered bark is applied on wounds.

A tea of the flowers and leaves is taken to relieve stomach ache, constipation, urinary tract infection, cystitis and eye and throat inflammation. The juice of crushed leaves and the powder of dried leaves are used as poultices on wounds and inflammations. The gum is employed as an expectorant and to expel tapeworms.