



## USE OF AGNIKUANRI (*AMMANIA BACCIFERA* L.) IN RINGWORM BY SOME OF THE VILLAGERS OF BIRMAHARAJPUR BLOCK (SONEPUR DISTRICT)

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### ABSTRACT

In the present short communication, use of a plant *Ammania baccifera* Linn (Agnikuanri), Family; Lythraceae in Ringworm (Local Name-*Daadu*), by some villagers of Biramaharajpur Block, Sonepur district (Odisha, India) is described. The plant used by the people of this locality is found commonly available, simple in use and with no side effects.

**Keywords:** *Ammania baccifera* Linn, Agnikuanri, Ringworm, Fungal skin infection

### INTRODUCTION

Plants are used in primary health care since times immemorial. India is endowed with the knowledge on Traditional medicine next to China in the world. Indigenous knowledge is still utilized in the many remote pockets of India where the modern medical practice is not feasible. In certain regions people have a proficiency in utilising traditional health practices and use medicinal herbs present in their vicinity for primary health care. Various medicinal plants are used by them for primary disorders ranging from common ailments like; cuts, burns, wounds and chronic ailments such as ; leprosy, psoriasis, eczema, dandruff etc. Traditional knowledge of health practice is presently retained only by the few practitioners. This knowledge base is shrinking because the younger generation is moving towards the cities and is not willing to continue the use of traditional practices.<sup>1</sup> There is a distinct possibility that these traditional practices may vanish in the near future. It is therefore, necessary to document such knowledge and conserve it. In this short communication the authors reported the use of *Agnikuanri* (*Ammania baccifera* Linn), an indigenous drug for the treatment of Ring worm. The plant *A.baccifera* has been evaluated for various anti-microbial<sup>2</sup>, anti-steroidal activities<sup>3</sup>, anti-inflammatory<sup>4</sup> cytotoxic<sup>5</sup> activity by different workers. The antifungal use of the plant is also mentioned in the classics of traditional medicine<sup>6,7</sup>. However, since the details of its use in Ringworm have not yet been documented, this communication is doing so.

### Study area and Methodology

In the present study the authors have observed the use of a herb by some of the local inhabitants of Biramaharajpur Block. The Biramaharajpur Block is located in Sonepur district (20° 49' 47" N and 83° 55' 12" E) of Orissa state in India. The Block is a dispersed area located at the left bank of the river Mahanadi.<sup>8</sup> The people residing in the villages on the river bank are fishermen by occupation and are many castes by division. viz; *Jhara, Keuta, Dhivara* etc. Ring worm locally called *Dadu*, is a common skin problem encountered in these villagers. People suffering from this condition are utilising the plant available in the vicinity of river bank of Mahanadi. The information herein has been gathered by personal interviews and direct observation.

### RESULT

#### The Disease

Ringworm is a contagious skin problem seen among 15-25% of people of the block. It usually starts as a small area of redness and scaling of the skin that spreads outwards, leaving scaly patches of temporary baldness. The area is sometimes itchy; infected hairs may be brittle and break off easily. Groin, trunk, feet and hands are the parts commonly affected. Males have greater incidence than females (Male: female= 2:1) and young people (Age 21-30 years) are affected more. The disease is prevalent in people with low socioeconomic status. People of this locality are also affected with other skin and mucosal infections like scabies, pyoderma and other superficial fungal infections caused by Dermatophytes, *Candida* spp, Tinea (*Malassezia furfur*) spp.

#### The drug

During the course of observation the authors have discovered that the plant used on the patches of Ringworm in the form of the paste, was a small herb, locally called *Agnikuanri*. The plant is named so because it looks red (Agni= fire) when matured and has hot, burning properties when applied locally. The plant was collected and identified as *Ammania baccifera* Linn, belonging to Lythraceae family (figure-1) and confirmed from the Regional flora and consultation with local Botanist. In Ayurveda it is also known as *Agnidarbha, Kshetravashini, Kurandika*. It is reported to be useful in the treatment of Rheumatism, Blood disorders, Strangury etc.<sup>9</sup>



Figure 1: *Ammania baccifera*

The plant is commonly found in the marshy places on the riverbank and rice fields in the plains. It is an erect herb,

glabrous, 6-8 in. long stem, leaves opposite, 2-5 in. long, usually narrow but obtuse, narrowed at the base, flowers in very condensed axillary racemes or clusters, bracts filliform and triangular, calyx widely campanulate, petals very minute, capsule globose depressed, seeds black, sub hemispheric.<sup>7</sup>

#### Method of use

The shoots of 5-6 plants, approx. 3-6 gms (the number may be more if the size of the lesion is big) are taken and made into a paste after properly cleaning them in cold water. Then the herb is ground with seven fruits of *Maricha* (Local name- *Golmaricha*, Botanical name- *Piper nigrum* L., Family- Piperaceae) and made into a fine paste. The paste is afterwards applied on the lesion of Ringworm and kept for half an hour to one hour. A single application is sufficient to cure the lesion, sometimes; one more application is needed in a few cases. No other concomitant medication is used by the affected people. The duration of application of medicated paste on the lesion is decided by the warmth and burning sensation felt by the patient. Then the paste is washed off with cold water.

The only adverse effect observed is staining of the skin that persists for a few days after treatment and also skin laceration if the paste is kept on the affected site for a long time.

#### DISCUSSION AND CONCLUSION

Among primary health problems, skin diseases are very common as they affect both the poor and affluent people in the society. Ringworm is a common superficial skin infection affecting a sizeable population in the tropics. It has been found that the disease has a higher incidence in young, may be due to greater physical activity and increased sweating. People with lower socio-economic status are affected more perhaps due to their living conditions, large family size, close contact either by sharing facilities including towels, combs etc. between family members. Groin and the trunk are the most affected areas because of low aeration, tight clothing, maceration and high rate of sweating. Though antifungal of modern medical system are available but due to the high price of the medicine and toxicity of systemic antifungal, folk

medicine has attracted considerable attention in recent years for its efficacy. Though the antifungal use of *A. baccifera* L. has already been described earlier its exact method of uses was not well known. In this communication an attempt has been made to describe its uses in a comprehensive manner. The herb is easily available, cheap and the method of preparation is very simple. Minimal side effects due to the acrid properties of the drug can be further reduced if some emollients is applied on the lesion immediately or by reducing the time of exposure to drug.

It was noticed that the plant is not available in rainy season when the river is full of flood water and the paddy fields are under cultivation, hence it needs proper conservation in waste grasslands present in the area above the bank of river for sustainable use.

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