



Herbal Garden (Muligai Vanam)

Acha Arisi



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Botanical Name : *Digitaria exilis* (Kippist) Stapf.
Tamil Name : Acha arisi
English Name : White Fonio, Fonio, Hungry rice, Acha rice

Distribution and Habitat

Digitaria exilis is a monocotyledonous annual cereal grass of the Poaceae family. It is one of the oldest indigenous cereals of Africa, cultivated for over 5,000-7000 years. It is a small, slender, tufted, erect annual herb, 30-80 cm tall, with fibrous roots and slender stems. It is native to the Savannahs and Sahel region of West Africa.



It has now been introduced to Dominican Republic and India on experimental basis as a climate-smart crop. *D. exilis* is known as one of the world's fastest maturing cereals, maturing in 42-90 days. It thrives in hot, dry, semi-arid climates with 250-1000 mm rainfall, temperature 25-32 °C and grows exceptionally well on poor, marginal, sandy, rocky or ironstone soils where other cereals like pearl millet and sorghum fail. It requires no chemical fertilizers and is highly drought tolerant. Leaves are narrow, linear, 10-30 cm long and 2-8 mm wide. Inflorescence is a digitate panicle with 2-5 slender racemes, 5-12 cm long. Spikelets small, 1.5-2 mm, in groups of 2-4. Grains are very tiny caryopsis, oblong to globose-ellipsoid, about 0.5-1.5 mm long, white to pale brown or purplish, tightly enclosed in a thin husk. Flowering within 30-45 days after sowing and grains mature quickly to bridge the hunger gap before main harvest, hence called "hungry rice".

Phyto-chemical constituents

Carbohydrates, proteins, sulphur containing amino acids, dietary fibre, low fat, B-complex vitamins, minerals like iron, calcium, magnesium, phosphorus, phenolic acids, flavonoids, phyto-sterols and tannins.

Parts used: Seeds as grains, straw as fodder, whole plant for soil conservation.

Uses

The tiny grains are de-husked and consumed as whole grain, flour, porridge, bread, pancakes, and local beer. Due to its short duration and ability to grow on degraded soils, it is used as a famine crop, cover crop and for preventing soil erosion and desertification. The straw and chaff are used as nutritious feed for cattle, sheep, goats and poultry. Its high methionine content makes it valuable as feed for monogastric animals. It supports low-input sustainable agriculture and biodiversity.

Medicinal uses

In traditional medicine, fonio is valued as a highly digestible, light and nourishing food. It is considered gluten-free, easily digestible and suitable for children, elderly, convalescents, diabetic and celiac patients (Zhu, 2000). Folk uses include treatment of fever, anaemia, malnutrition, diarrhoea and digestive disorders. Due to



its low glycemic index, high fibre and rich methionine and cysteine content, it is recommended for management of diabetes, obesity, hyperlipidemia and cardiovascular health. Its antioxidant phenolics contribute to immune support and protection against oxidative stress. The grain gruel is used as a cooling beverage, weaning food and for postpartum recovery. Pharmacological studies report anti-diabetic, anti-hyperlipidemic, anti-anaemic and antioxidant activities (Ibrahim et al. 2024). Being gluten-free and highly digestible, it is gaining global recognition as a functional, nutraceutical and climate-resilient super-food for preventive healthcare and food security (Deriu et al. 2022).

Photo link: <https://www.facebook.com/groups/541635466700491/posts/983917555805611/>

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1. Free Siddha Medical Camp

A Free Siddha Medical Camp was successfully conducted at the Green Rameswaram office from 28th September to 1st October 2026, benefiting 119 patients. The camp was inaugurated by Siddha Vaidyar Shri Nagalingaraja by lighting the traditional lamp. Patients participated with keen interest and received Siddha medical consultation and treatment.



Doctors and Vaidyas checking the patients

Medical Services:

- Medical consultations and treatments were provided over four consecutive days.
- Patients with complex medical conditions received special attention, and customised Siddha medicines were prepared on the spot to meet their specific needs.
- Each patient received Siddha choornams (herbal powders) and oils worth an average of ₹500, free of cost.
- Two male masseurs and one female masseuse provided therapeutic massages to help relieve pain and muscular ailments.
- The camp received encouraging feedback from the public. Many patients requested that such camps be organised monthly, reflecting the growing trust in and appreciation of traditional Siddha medicine.

2. Free Eye Medical Camp

A Free Eye Camp was successfully organised on 16 September 2026 by the Green Rameswaram Trust, in collaboration with Aravind Eye Hospital, Madurai, to provide accessible eye-care services to the local community. Held from 10.00 a.m. to 1.00 p.m. at the Green Rameswaram Project Office, near Rameswaram Railway Station, the camp benefited 114 patients through eye screening and medical consultation.



Patients Arrive for Eye Screening

Inauguration:

The camp was inaugurated at 10.00 a.m. with a traditional lamp-lighting ceremony. Dr. Nazima Maraikayar, Secretary, Kalam International Foundation, graced the occasion as the Chief Guest. The inauguration highlighted the importance of regular eye check-ups and timely treatment for vision-related problems.



Dr. Nazima Maraikayar, Secretary, Kalam International Foundation, Lighting the Lamp

Eye Screening and Medical Services

A 13-member team from Aravind Eye Hospital, including doctors and supporting medical staff, conducted eye examinations and provided medical consultations. Patients requiring spectacles were offered eyeglasses at affordable prices, while those needing specialised examinations were referred to suitable eye-care centres for further evaluation and treatment.



Cataract Identification and Free Surgery

During the screening, 17 patients were identified as requiring cataract surgery and selected for free surgery at Aravind Eye Hospital, Madurai. They travelled to the hospital with the necessary guidance and support, and their surgeries were performed the following day. The hospital also provided food, accommodation and post-operative care. A follow-up eye check-up will be conducted after one month to monitor their recovery.

Cataract Patients Identified and Tagged for Treatment

Support and Coordination

Lunch was arranged for the Aravind Eye Hospital medical team and the cataract patients. The dedicated efforts of the medical team, volunteers, organisers and the Green Rameswaram project team ensured the smooth and successful conduct of the camp, bringing essential eye-care services to the local community.



Cataract Patients Identified and Tagged for Treatment

