

Midin (*Stenochlaena palustris*), the popular wild vegetable of Sarawak

The midin fern *Stenochlaena palustris*—wild-grown, crunchy-succulent, pesticide-free and served within 24 hours of harvesting—is the favorite vegetable of Sarawak

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Midin spreading on open ground.

When it comes to food, three dishes are uniquely linked to Sarawak: Sarawak laksa, Sarawak kolo-mee and midin. Laksa is bee-hoon or rice vermicelli cooked in a stock of blended spices. Kolo-mee is a dry noodle dish prepared by dipping noodles briefly in boiling water, and served with slices of meat or sea food. Midin is a local fern picked from the wild and used as a vegetable.

Midin, also called *paku midin* or *lemidin*, is a fern in the family Blechnaceae. It is a sun-loving plant that thrives in open areas, usually on swampy land. Common habitats are disturbed forests, secondary forests, rubber gardens, oil palm plantations, river banks and roadsides. The

fern is distributed naturally over a wide area that stretches from South India through Southeast Asia, to Northern Australia and Polynesia. In Sarawak it is found from the lowlands to mountains up to about 1,000 m above sea level. The plant is spread by vigorous shoots that run along the ground and climb up trees and other supports. It appears to be resistant to pests and diseases. Regeneration occurs naturally under the partial shade provided by the adult plants.

In the Penan community, midin is eaten by mothers after childbirth to regain energy. Burkill (1936) has reported its use for fever, for which a decoction of the fresh juice is consumed, or an infusion is placed on the head.



Midin climbing on trees.

Although geographically widespread, nowhere does midin enjoy such a high status in local cuisine as in Sarawak. Formerly midin was mostly consumed by the rural peoples, but it is now served in almost every local restaurant and food stall in Sarawak.

The leaves or fronds are pinnate, i.e. divided into leaflets, and light green or red when young, maturing green. The young fronds are curled up like fiddleheads and are most succulent at this stage. Rural communities enjoy the vegetable fresh by picking and eating it on the same day. Picking is easily done by snapping off the succulent fiddleheads with the fingers. For sale, the fern is normally picked in the evening and taken to the market for sale the next morning, or sold to vendors who have stalls in the market. The product is divided into bundles of about 500 gm each and each bundle is wrapped in a simpor (*Dillenia suffruticosa*) leaf to keep fresh. A vendor is able to sell up to 20 bundles a day, at RM 2.50 to RM 3.00 per bundle.

Restaurants and food stalls buy the product from suppliers at up to RM 15.00 per kg for the young fiddleheads and RM 10.00 for the older ones. Midin should be cooked and eaten within the same day. It will begin to turn black after one day, even if kept in a refrigerator. Because of its short shelf life, many restaurants and food stalls limit their orders to 3 to 5 kg per day. The short shelf life ensures that midin cannot be exported and will always remain a local delicacy.

The Sarawak Department of Agriculture conducted fertilizer and shade trials in acid sulphate soils at Rampangi near Kuching in the mid-1990s. Both shaded and unshaded plants responded well when fertilizers were applied to the drained soils. The crop was harvested at two-weekly intervals, but mortality was high, due probably to over-exposure to sunlight or to insufficient soil moisture, and replanting had to be carried out. Income was estimated at RM 8,000 to 9,000 per hectare. In a subsequent trial, the young plants were tied to wooden posts,



Newly harvested midin.



Midin wrapped in *Dillenia* leaves.

much like the planting of the pepper *Piper nigrum*. Nutrient analysis (Voon *et al.*, 1992) has shown that midin contains 92% moisture, is very low in fibre, but high in potassium, phosphorus and iron. Also present are calcium, manganese, copper and zinc.

There has so far been no attempt to cultivate midin as a farm crop, probably because it is still easily available from the wild and free for anyone to pick. However, in several rural towns like Dalat near Sibul, some farmers have started to protect wild midin plots to enhance production and ensure regular supply to meet demands. Most importantly for many consumers, midin is wild-grown and free of the agricultural chemicals that farmers apply to cultivated vegetables.

Pesticides and other chemicals used in nearby

oil palm plantations and vegetable farms, and pollution by heavy traffic may be expected to contaminate some midin habitats. In the future, such damage may affect supply and weaken midin's attraction as a health food, but for now it is safe and increasing in popularity.

Midin remains crunchy-succulent even when cooked, normally by frying with slices of garlic, dry shrimps or belacan (shrimp paste). More recently, it has been served as a green salad with vinegar, small dried shrimps or small dried fish (ikan bilis), and slices of shallot, garlic and chili. By itself, the fern is neutral in taste, hence easy to combine with other ingredients.

Midin dishes are popular with both the rich and the poor throughout Sarawak. Local hosts will, almost without exception, recommend the dish to their foreign guests, and many foreign guests have come to love it.

Bibliography

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