

A List of Edible Insects Sold at the Public Market in Khon Kaen, Northeast Thailand

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In their book *Edible Insects in Northeast Thailand*, Varaasvapati *et al.* [1975] describe various insects eaten as food, including stink bugs, water-scorpions, and mantids. This was followed by Mungkorndin [1981], *Forests as a Source of Food to Rural Communities in Thailand*, which deals with the edible plants and animals of the whole of Thailand. Moreover, Sangpradub [1982] found that insects account for 44 percent of edible invertebrates in northeast Thailand.

We have found that various insects are sold as food at the public market in Khon Kaen, a major city of northeastern Thailand. This paper describes 15 of these insects, their prices, seasons and other details.

The senior author stayed in Khon Kaen several times in the period 1979-1981 and often visited the market and checked

the insects sold. The junior author has been making a study of edible insects in northeastern Thailand since 1981.

A List of Edible Insects Sold at the Public Market in Khon Kaen

The following list covers items consisting of a single insect or a main insect with a small admixture of closely related species. Mixtures of diverse insects sold unsorted or of a main insect with other insects for bulk are beyond the scope of this list. The seasons of sale are coded as follows in the list.

- A: Most or all of the year
- B: Mainly the rainy season (May-October)
- B': A short period at the end of the rainy season (September-October)
- C: Mainly the dry season (February-April)

While some insects are sold live, most are first steamed. This is indicated in the list as "live" or "steamed".

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Thai Name	Scientific Name	Common Name	Remarks (Price, Season of Sale, etc.)
Malaeng Da Na (Maeng Da Na)	<i>Lethocerus indicus</i> Belostomatidae, (Hemiptera)	Giant water bug (Adult)	Very popular food. One male, 3-5 baht; one female, 2 baht. A, steamed or live. Usually used to flavor Nam Prik Malaeng Da. In late rainy season people eat the mature eggs in the ovary. (Photo 1)
Malaeng Krachorn	<i>Gryllotalpa africana</i> Gryllidae, (Orthoptera)	Mole cricket (Adult)	One shallow scoop (diameter about five cm, as shown in the picture), 2 baht. B, live. (Photo 2)
Duck Dae Tua Mai	<i>Bombyx mori</i> Bombycidae, (Lepidoptera)	Silk worm (Pupa)	Very popular food. Five scoops, 5 baht; one kg, 25 baht. A, steamed. (Photo 3)
Malaeng Tub Tow	<i>Cybis</i> sp. Dytistidae, (Coleoptera)	Predacious diving beetle Water beetle (Adult)	Three scoops, 5 baht; Two scoops, 1 baht (Sept. - Oct.). B, steamed. (Photo 2)
Malaeng Nian	<i>Hydrous</i> sp. Hydrophidae, (Coleoptera)	Scavenger beetle (Adult)	Price is the same as the above. Often mixed with the above. Steamed.
Kood Chi (Good Gi)	<i>Copris</i> sp. <i>Onthophagus</i> sp. Scarabaeidae, (Coleoptera)	Dung beetle (Adult)	Five small scoops, 5 baht. B, steamed. (Photo 4)
Pong Peng Malaeng Ngum	Aeschnidae, Libellulidae, (Odonata)	Dragon fly (Larva)	Only large larvae are sold. One scoop, 2 baht; three scoops, 5 baht. B', live. (Photo 5)
Ching Reed (Chi Reed) Ching Klong Chi Pom	<i>Acheta bimaculata</i> <i>Brachytrupes portentosus</i> Gryllidae, (Orthoptera)	Cricket (Adult)	25 adults, 5 baht. B', steamed. (Photo 6)

Thai Name	Scientific Name	Common Name	Remarks (Price, Season of Sale, etc.)
Tukkatan (Tucka Tan)	<i>Locusta</i> sp. Locustidae, (Orthoptera)	Locust (Adult)	Popular food. Sometimes mixed with grasshoppers, mantises or green hoppers. One scoop, 1 baht; 100 gram, 3 baht. B, steamed or sometimes live. (Photo 7)
Malaeng Kinoon Daeng Malaeng Kinoon Mone	<i>Holotrichia</i> sp. <i>Exopotus</i> sp. Scarabaeidae, (Coleoptera)	June beetle (May beetle) (Adult)	Daeng has metallic colored elytra, Mone has dark elytra. One scoop, 1 baht. B, steamed. (Photo 8)
Pung (Rueng Pung)	<i>Apis</i> sp. Apidae, (Hymenoptera)	Honey bee (Beehive)	One beehive, 5-10 baht, depending on the size and maturity of larvae. Live. (Photo 9)
Khai Mot Daeng Mae Peng	<i>Oecophylla smaragdina</i> Formicidae, (Hymenoptera)	Weaving ant (Larva, Pupa)	Two scoops, 2-5 baht; one handful, 10 baht. Prices depend on quality, being cheaper with a higher proportion of adults. C, steamed. (Photo 10)
Malaeng Tub	<i>Sternocera</i> sp. Buprestidae, (Coleoptera)	Metalic wood borer (Adult)	Two adults, 1 baht. B', live. (Photo 11)
Malaeng Krarm Duang Ma Prao	<i>Xylotrupes gideon</i> Dynastidae, (Coleoptera)	Hercules beetle (Adult)	Two adults, 1 baht. Females are preferred because they are not pets but food. B', live. (Photo 12)
Malaeng Muan Won Manghua Qai	Notonetidae, (Hemiptera)	Swimmer (Adult)	One small bag, 3 baht; three small spoonful, 2 baht. Usually several other aquatic insects, e. g. water boatmen, are intermixed. C?, live.

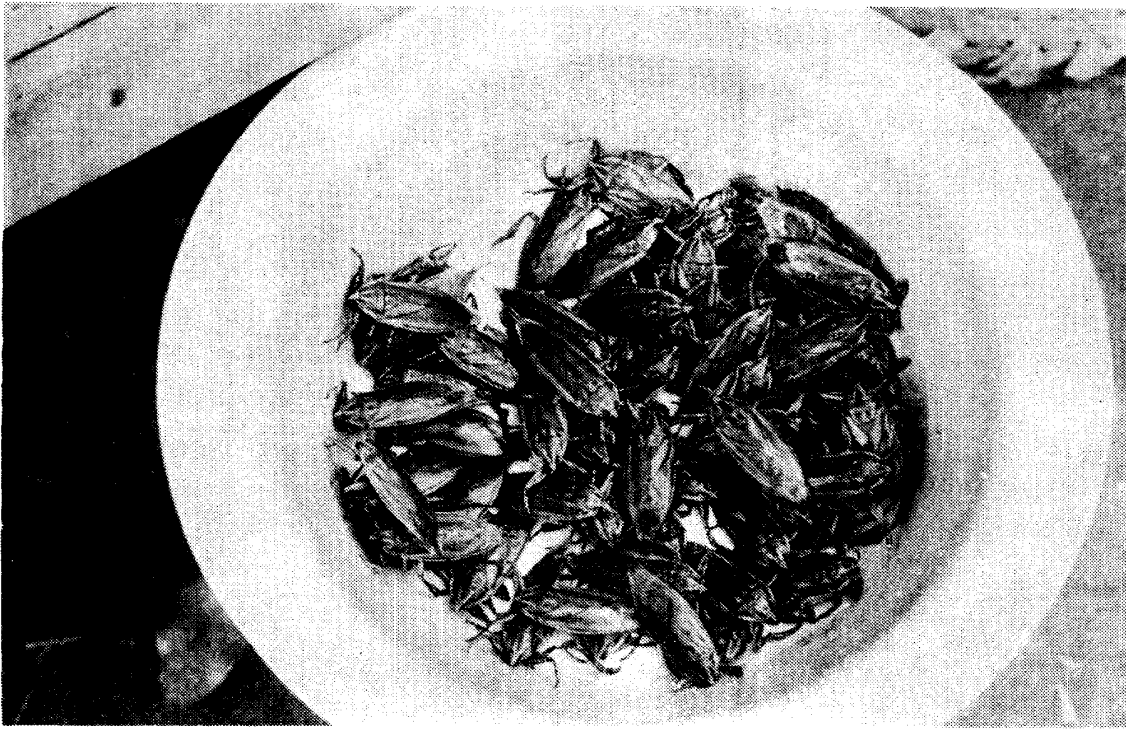


Photo 1 Giant water bug (Malaeng Da Na)



Photo 2 Mole cricket mixed with water beetle
(Malaeng Krachorn and Malaeng Tub Tow)

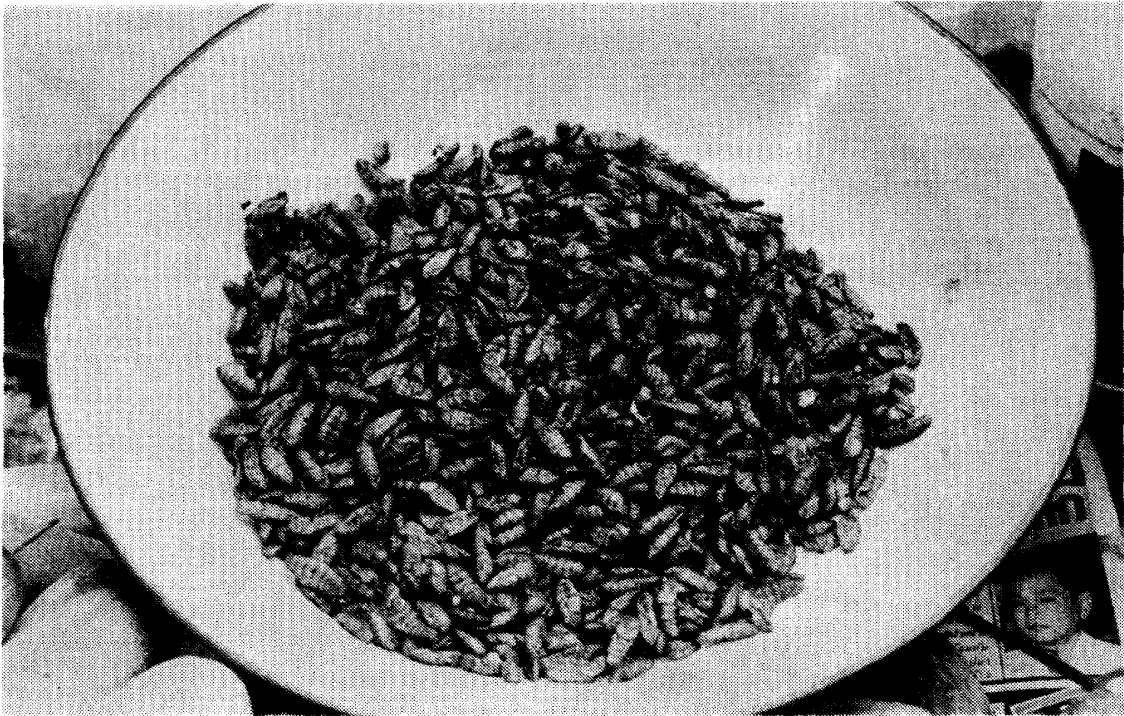


Photo 3 Pupa of silk worm (Duck Dae Tua Mai)

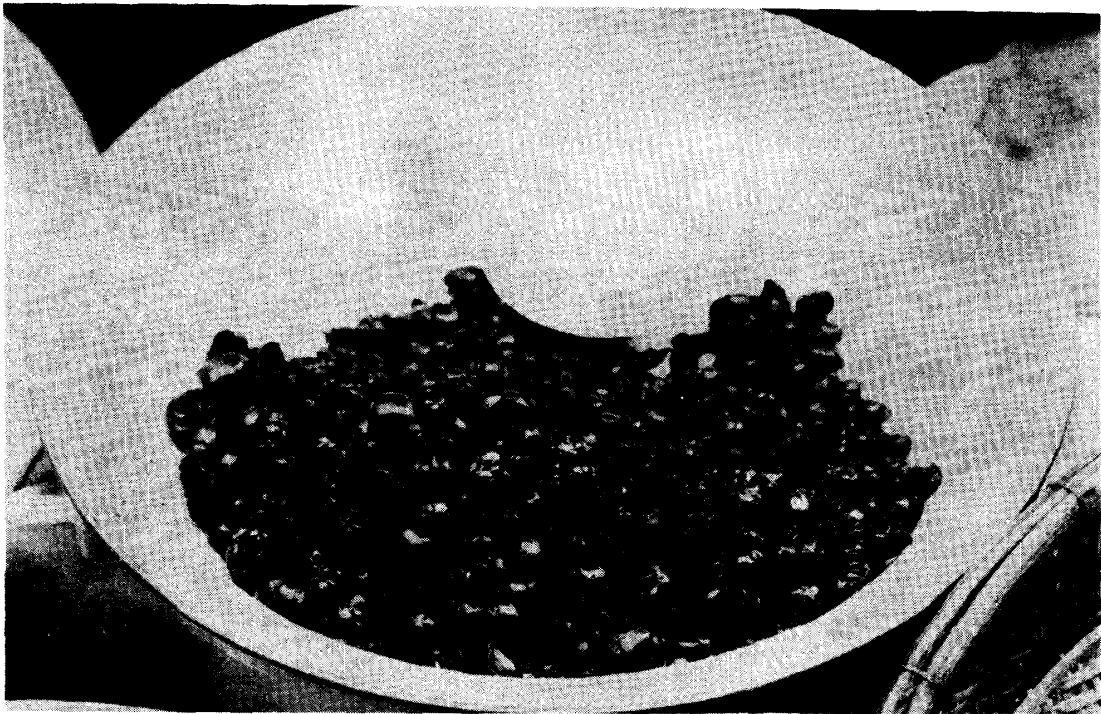


Photo 4 Dung beetle (Kood Chi)

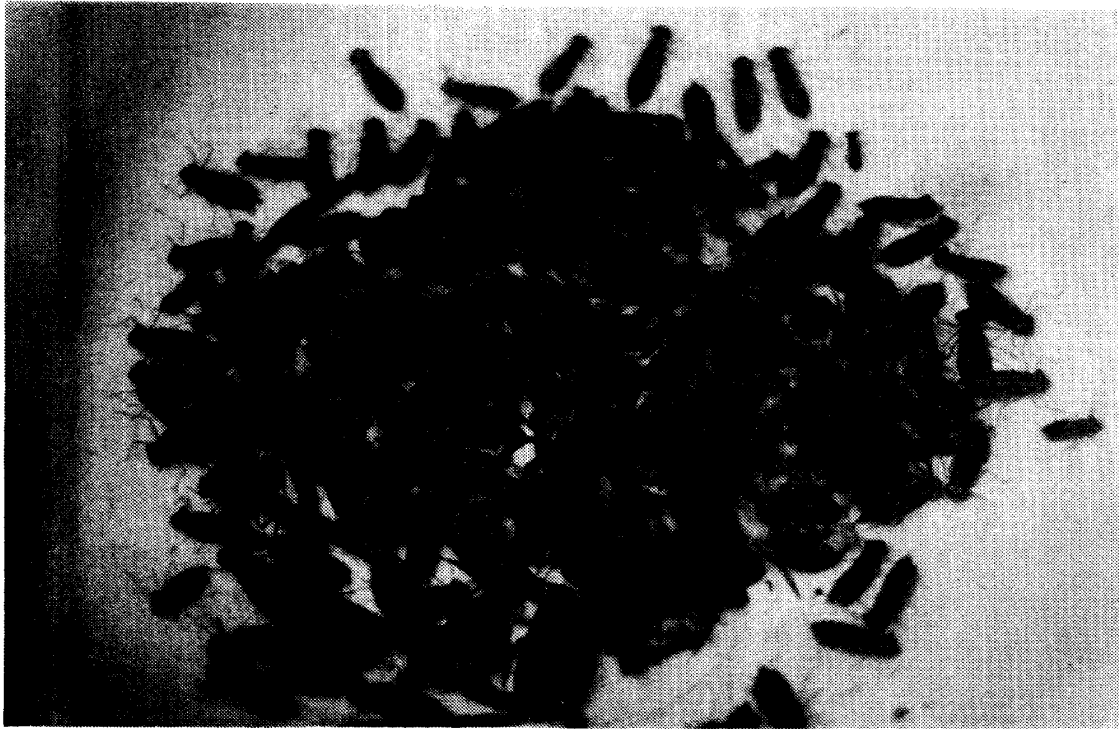


Photo 5 Larva of dragon fly (Pong Peng, Malaeng Ngum)



Photo 6 Cricket (Ching Reed)



Photo 7 Locust (Tukkatan)

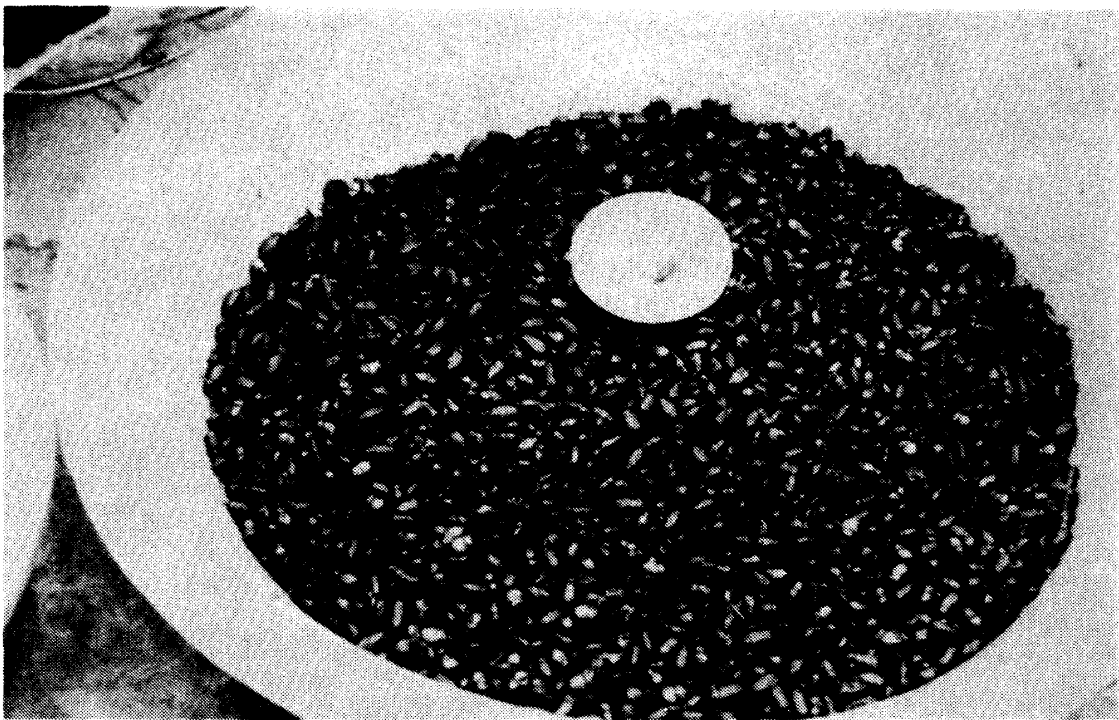


Photo 8 June beetle (Malaeng Kinoon Mone)



Photo 9 Beehive (Pung)

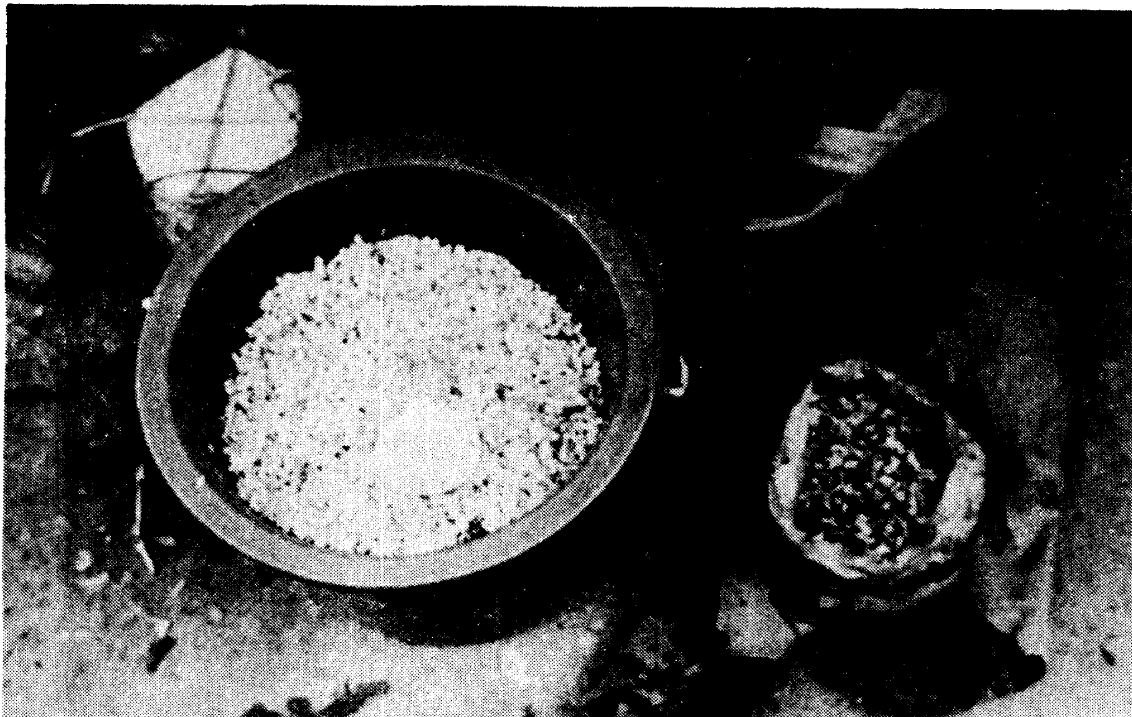


Photo 10 Larva of weaving ant (Khai Mot Daeng)

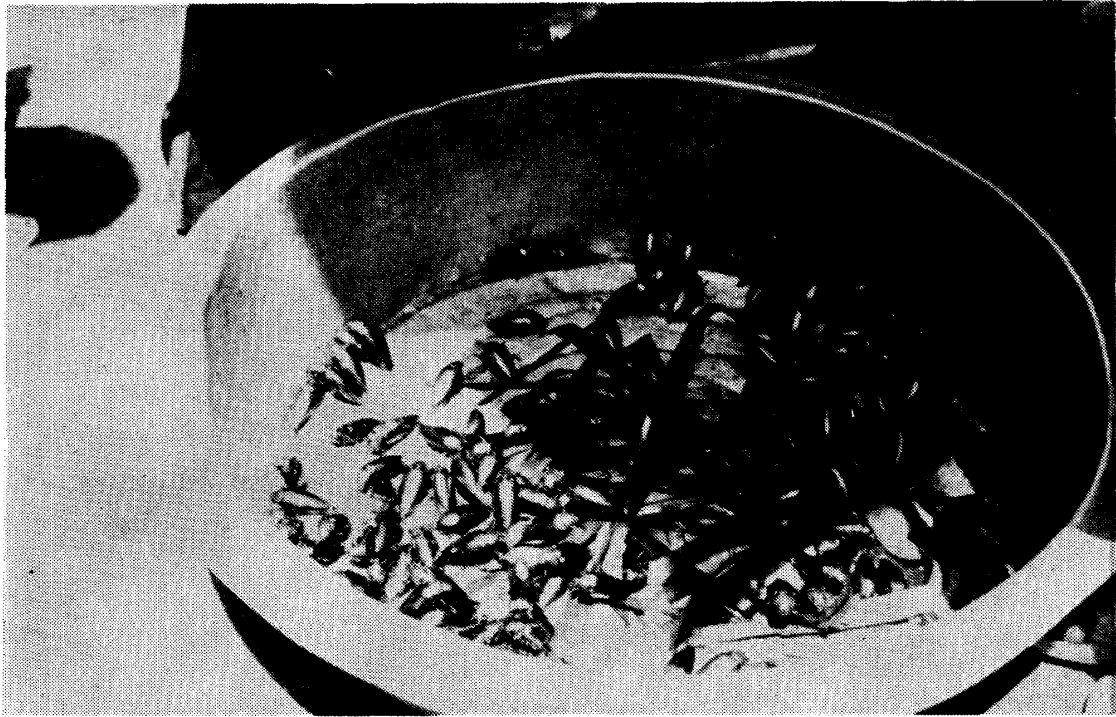


Photo 11 Metallic wood borer (Malaeng Tub)



Photo 12 Hercules beetle (Malaeng Krarm, Duang Ma Prao)

The insects listed are important protein sources for rural people in this region and they are also saleable in urban areas, being quality food available in quantity. To ensure a continued supply, however, collection methods will need to be improved and rearing methods established.

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