ANIMAL UTILIZATION AS TRADITIONAL MEDICINE IN CENTRAL JAVA.

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Introduction

In Indonesia, the use of wild animals as traditional medicine is well known by the local and international community. In Central Java, there are several species of wild animals that are harvested for their medicinal properties. These animals include birds, reptiles, and mammals. The use of wild animals as medicine is not only prevalent in Central Java but is also practiced in other parts of the world.

Materials and Methods

Research was carried out from May to August 2007 in 19 sub-provinces of Central Java (Residences of Kudus, Pari, Wonosobo, Jepara, Sragen, Karanganyar, Sukoharjo, Klaten, Boyolali, Magelang, Semarang, Cilacap, Banjumas, Banyumas, Pemalang, and cities of Tegal, Surakarta, Magelang, and Semarang). Information was obtained through semi-structured questionnaires applied to 105 respondents, which consist of 30 harvesters, 30 traditional pharmacists, and 30 settlers. Data taken were name of species, taken for medicinal purposes, the owner of the harvest, harvest method, medicinal purposes, and monetary value.

Results and Discussions

We recorded 56 animal species utilized in traditional medicine, consisting of:

1. Two species of livestock animals: water buffaloes and marmal.
2. Ten species of invertebrates: scorpion, puffer fish, puffer fish, eel, squid, crab, turtle, turtle, turtle, and turtle.
3. Three species of amphibians: tree frog, giant tree frog, and giant tree frog.
4. Four species of birds: raptor, woodpecker, woodpecker, woodpecker, and woodpecker.
5. Eleven species of mammals: monkey, monkey, monkey, monkey, monkey, monkey, monkey, monkey, monkey, monkey, and monkey.
6. Four species of reptiles: crocodile, crocodile, crocodile, and crocodile.
7. Three species of mammal and reptile: crocodile, crocodile, and crocodile.

These species are used for various purposes, including food, medicine, and ceremonial occasions. The economic value of these animals is significant, with harvests ranging from 30 to 105 species per year.

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References

Ilizazion as Traditional Medicine in Central Java.

Malks, Burhanuddin Masyau, and Mirda Dwidjendra.
First Resources Conservation & Ecotourism, Faculty of Forestry, Bogor
University. Kampus Darmaga, Bogor - Indonesia.

1 medicine, economic value, medicinal wild animal, Central Java

of wild animal as "makanan" by the local
people in several places such as China,
where they use wild meat for traditional
consumers of wild meat. The annual
value in 5) Eleven species of wild animals
are listed for exports such as wild
mammals, snakes, turtles, and crocodiles.

4) A family of birds: Pousen-
bred Woodpecker (Dendrocopos
major), Flycatcher (Xyornis sp),
and Edible Nist Swiffer (Coliusus sp).

5) Eleven species of mammals: agouti
(Catagonisag) Tree Shrew (Tupaia
sp), bats (Cynopterus sp), Monkey
Flying Fox (Pipuzus vampyrus),
Collared Mongoose (Hemihyda
demogueia), Long-tailed Macaque
(Macaca fascicularis), Malayan
Porcupine (Hystriculus jungyi), Asian
Palm Civet (Paradoxurus hermaphroditus), Small Indian Civet
(Viverricula indica), Deer (Cervus unicolor),
Malayan pangolin (Manis javanica).

6) Three species of Amphibians: Crab
eating frog (Parexata crinicornis),
Giant Javan frog (Hylarchodes
triquidum) and Common Toad (Bufo
rubro).

7) Twenty-one species of reptiles: Water
monitor (Varanus salvator), Saltwater
crocodiles (Crocodylus porosus),
Soft-shell turtle (Trionyx cartilagineus),
green turtle (Chelonia mydas), Giant
Gecko (Gecko gecko), Agamid flying
Lizard (Draco sp), House Gecko
(Impeamductylus hermani), common
gibbons (Hylobates macacus), Green
crested lizard (Bronchocela sp), King Cobra
(Ophiophagus hannah), Javan Spitting
Cobra (Naja sputatrix), Indochinese
Rat Snake (Ptyas korros), Retilcated
Python (Python reticulatus), Asian Rat
Snake (Ptyas mucosus), Copperhead
RatSnake (Elaphe radiata), Golden
Banded Snake (Bungarus fasciatus).

Three species of mammals (porcupine,
deer, and pangolin) is listed on protected status
by Indonesian law as well as two species of
guppies (saltwater crocodiles and green turtle).

Products from these 54 species of wild animal
are recommended for the treatment of 50
kinds of illnesses. The most frequently quoted
treatments were for respiratory system (20
species), skin disease (18 species) and
increasing stamina and appetite (4 species).

Most people believed that the Javan spitting
snake (Naja sputatrix) has the most medicinal
properties compared to other species (25.10%)
followed by water monitor (11.52%), Tokay
goat (10.7%), Malayan Flying Fox (8.32 %
and soft-shelled turtle (4.53%).

Although medicinal product from wild
animal is often cooked, however some parts
such as blood, gills, bone marrow and liver is
used in raw form. The use of raw parts is
practiced, since it could lead to zoontic agents
causing diseases or infection to human. The
predicted number of wild animal population
harvested is high. For instance, Tokay Gecko
which is the highest rank in number of
harvested, reaches up to 975 thousand
animals per year.

All wild animals used for traditional
medicine is harvested from the wild, no
spies except for livestock animal is captured
broadly. Harvested the animal to collectors,
and small collector then sold the
animal to bigger collector or straight to
traditional pharmacist, sellers, and exporters.
Traditional pharmacist sold the products to
consumers or to sellers who will then sold it to
consumers. The marketing of products by
traditional pharmacist is conducted at their
own
home (20%), kiosk (16.67%), street stall (60%)
or in clinic (3.33%).

Animal is sold live or in dead form. From
harvester to collectors, the animal is usually
sold alive, but later it will be killed and sold to
the next level (traditional pharmacist, sellers,
and exporters) in dired form, as meat only or in
other type of herbal extract. The economic
value of wild animal to human health in Central
Java is estimated to reach Rp.1.421,714,004
per year (near US$1.5 million).

Medicinal wild animal is used for local
consumption and exported. Dari from Central
Java Provincial Commerce Board, showed that
several wild animals are listed for exports such
as swift let to Canada; Crod geckoes,
smake meat, dried snakes and snake blood to
Hong Kong and Shark fins to Japan
(Disperindag Jateng 2006).

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References:
Alves RNN, Rosa L. 2005. Why study the use
of animal products in traditional
medicines? Journal of Ethnobiology and
Ethnomedicine 1:5
(Disperindag) Diap Perindustrian dan
Perdagangan Propinsi Jawa Tengah.
2006. Realisasi Eksport Non Hewan Jawa
Tengah Periode Mei sampai September
2006 [laporan]. Disperindag Jateng
Semarang.