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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER
REVIEW KARYA ILMIAH: PROCEEDING

Judul Artikel Ilmiah	:	**The Effectivity of Green Coconut Water to Reduce Mercury Level in the Blood and to Improve Blood Profiles and Liver Cells Appearance (Study in Sprague Dawley Rats)**
Nama semua penulis	:	Abdulrzag Ehmeeda M, Tri Nur Kristina**, Ari Suwondo,** Henna Rya Sunoko
Status Pengusul (coret yang tidak perlu)	:	~~Penulis Utama~~ / **Penulis Anggota**

Status Proceeding:

• Nama Proceeding/ Seminar ICENIS 2017	:	2nd International Conference on Energy, Environmental and Information System,
• Edisi (bulan, tahun)	:	15-16 Agustus 2017
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Dipresentasikan secara Oral dan dimuat dalam prosiding yang dipublikasikan (beri tanda V yang sesuai)

Seminar	[√]	Internasional Terindeks Scimago SJR dan Scopus SJR 0,166
	[ ]	Internasional Terindeks pada SCOPUS, IEEE Elrplore, SPIEi
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d	Kelengkapan unsur dan kualitas Proceeding	Merupakan jurnal ilmiah bereputasi

Semarang, 20 Maret 2020
Reviewer 1

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Jabatan : Lektor Kepala

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c	Kecukupan dan kemutahiran data/informasi dan metodologi	Penulisan metode sudah cukup lengkap. 10 referensi kurang update
d	Kelengkapan unsur dan kualitas Proceeding	Merupakan jurnal ilmiah terindekx di scopus SJR 0,166

Semarang, 27 Januari 2020
Reviewer 2

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The Effectivity of Green Coconut Water to Reduce Mercury Level in the Blood and to Improve Blood Profiles and Liver Cells Appearance (Study in Sprague Dawley Rats) (Conference Paper) (Open Access)

Abdulrzag Ehmeeda, M.[a], Kristina, T.N.[b], Suwondo, A.[c], Sunoko, H.R.[b]

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[b]Faculty of Medicine, Diponegoro University, Semarang, Indonesia
[c]Faculty of Public Health, Diponegoro University, Semarang, Indonesia

Abstract

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When people are exposed to mercury chloride, it can produce a variety of health effects in the blood and liver. Coconut water contains Zn, Fe, Vit. C, Vit B11, Vit. B6, and Se to reduce mercury chloride level in the blood and improve blood profile and liver cells. Aim of this study was to analysis the effect of green coconut water supplementation in overcoming the toxic effect of Hg chlorid in the blood and liver of Sprague dawley rats exposed to Hg chloride. Samples were randomly about 36 animals rats exposed to HgCl2 through forced feeding by 20 mg/kgBW sondage per day for 14 days, which divided into control group, and intervention groups were given fresh green coconut water in each by 6, 8, and 10 mL/kgBW for intervention 7 and 17 days. The result of this study showed that there is a significant effect and the decrease in mercury levels in the blood. There is no significant affect on the hemoglobin level, hematocrit level and platelet count with the treatment of green coconut water in the mice with exposure Hg. There is no significant effect between treatments using green coconut water with SGPT levels; there is a decrease in SGPT levels at the increasing number of doses of green coconut water and the length of treatment. © 2018 The Authors, published by EDP Sciences.

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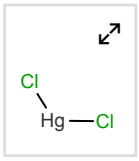

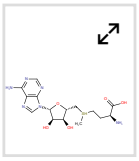
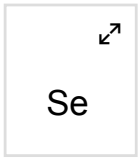

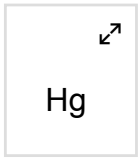

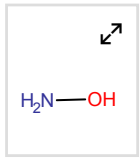

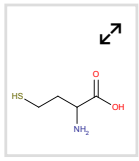

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Physicochemical Characteristics of Artificial Rice from Composite Flour: Modified Cassava Starch, Canavalia ensiformis and Dioscorea esculenta 06005

Siswo Sumardiono, Isti Pudjihastuti, Noer Abyor Handayani and Heny Kusumayanti

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Prevalence of Hookworm infection and Strongyloidiasis in Cats and Potential Risk Factor of Human Diseases

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Abstract. Hookworm infection and Stronyloidiasis are public health problem in the worldwide which both of them could infective in human by penetrated on skin and they have potential risk from Gastrointestinal zoonotic helminths of pets, including cats. We investigated the prevalence soil transmitted helminths infection in human and cats used modified Formal-Ether Concentration and agar plate culture. Fecal samples of 23 cats and human from Naitung and Subua Villages (area study 1), and fecal samples of 15 cats and 17 humans from Thasala Beach villages (area study 2) were collected. Result of study in area study 1 showed prevalence of infection in human was not hookworm and strongyloidiasis but 10% humans have infected Ascaris and Tricuris, and in cats have infected by hookworm 75.2% and S. strercoralis 8.5%, toxocara 13%, spirometra 13% and overall prevalence 82.5%. In area study 2 showed in human has infected by Trichuris 100% and S. stercoralis 29.4% and in cats have infected by hookworm 100% and S. strercoralis 40%, toxocora 20%, and spirometra 20%. Helminth infection found in both humans in two areas study are S. strercoralis. Hookworms were the most common helminth in cats but did not connection with infection in human, while S. strercoralis was helminth infection in cats which has potential zoonotic disease to human.

1 Introduction

Dogs and cats play a significant role as reservoir hosts for gastrointestinal zoonotic parasites including protozoa, trematode, cestode and nematode [1, 2, 3]. Humans can be infected via contact with a dog or cat or via contamination of infective stages in food or water [4, 5].

Worldwide, there is a significant variation in the prevalence of gastrointestinal zoonotic helminths in dogs and cats [6, 3]. High infection rates of zoonotic parasites including hookworms, *Trichuris spp., Spirometra spp., Taenia spp., Toxocara spp.* and *Opisthorchis spp.* have been reported [7,8,6,3]. Infection of zoonotic helminths has previously been researched in Thailand.

In the central area, a high prevalence of hookworm Ancylostoma ceylanicum was reported among dogs in temple communities in Bangkok [9]. The infections of zoonotic helminths, hookworms, *Trichuris spp., Toxocara spp.* and *Spirometra spp.* were found in dogs and cats in animal refuges [10].

In the Northeastern area, a high infection rate of liver fluke, Opisthorchis viverrini (O. viverrini) in dogs and cats, was found in communities where O. viverrini infection in human was high [3]. In Thailand, infections of hookworms and O. viverrini are the major public health problems [11, 12, 13, 14, 9]. Infections of zoonotic hookworms, A. ceylanicum and A. caninum, have been reported in many areas [13, 9]. Molecular analysis showed A. ceylanicum is prevalent in humans and dogs in the Central and the Northeastern areas of Thailand [13, 9].

Another STH, *Strongyloides stercoralis*, is often neglected in helminth surveys [15, 9], yet previous studies show high *S. stercoralis* infection rates in Cambodia [16]. School-aged children in the developing world are at highest risk of morbidity due to STHs and intestinal protozoan infections [17].

However, mass treatment only focuses on three major STHs (*Ascaris*/hookworm/*Trichuris*). Other nematodes like *S. stercoralis*, trematodes and protozoan infections are not addressed. In rural Southeast Asia,little is known about the zoonotic potential of IPIs in humans and animals. Therefore of domestic animals, such as cats, dogs and pigs, as contributors to human STHs and as reservoir hosts for zoonotic parasites remains unexplored and/or the data are inaccessible.

Although surveys of zoonotic gastrointestinal helminths in dogs and cats had been done in Thailand, most of the studies have focused on the Central or Northeastern region [18, 19, 10, 20]. This study to investigate prevalence of zoonotic helminth infection in cats that potential risk factors to human.

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Management to Insulate Ecosystem Services from the Effects of Catchment Development

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Abstract. Natural ecosystems provide amenity to human populations in the form of ecosystem services. These services are grouped into four broad categories: provisioning – food and water production; regulating – control of climate and disease; supporting – crop pollination; and cultural – spiritual and recreational benefits. Aquatic systems provide considerable service through the provision of potable water, fisheries and aquaculture production, nutrient mitigation and the psychological benefits that accrue from the aesthetic amenity provided from lakes, rivers and other wetlands. Further, littoral and riparian ecosystems, and aquifers, protect human communities from sea level encroachment, and tidal and river flooding. Catchment and water development provides critical resources for human consumption. Where these provisioning services are prioritized over others, the level and quality of production may be impacted. Further, the benefits from these provisioning services comes with the opportunity cost of diminishing regulating, supporting and cultural services. This imbalance flags concerns for humanity as it exceeds recognised safe operating spaces. These concepts are explored by reference to long term records of change in some of the world's largest river catchments and lessons are drawn that may enable other communities to consider the balance of ecosystems services in natural resource management.

1 Introduction

Human societies have reaped food, water and materials from river catchments. While climate variability at a range of time scales has mediated the supply of these resources at regional scales, the sedentarisation of human communities through the Holocene, and the attendant increases in population and technology, has increased the intensity of resource exploitation. The Millennium Ecosystem Assessment reveals the further amplification of impacts of human resource exploitation from the mid-20th century identifying the Great Acceleration, which has prompted calls for the demarcation of a new geological epoch, The Anthropocene [1,2].

While ethical arguments can be mounted that natural systems warrant conservation for intrinsic reasons, the Ecosystem Services they provide humans is increasingly being used to justify investment in wise management [3]. It is recognised that the demand for consumptive resources such as food, water, energy, timber and minerals for the construction of shelter and fibre for clothing is impacting negatively on the other services provided humanity by the natural environment. In market based economies there remain opportunities for the price of consumption to reflect merely the cost of production, with little requirement for it to reflect the trade-off in the loss of assets and services, that are valuable, but represent a challenge to quantify economically. Without full cost accounting of the trade-offs between services society risks undermining the support afforded by the less quantifiable phenomena and, ultimately, the ongoing supply of provisioning services.

The most readily identifiable services provided by natural ecosystems are usually those that provide directly for human needs. These Provisioning Services comprise potable water and food, including those harvested directly such as fish and native fruit, as well as those sown by people such as crops and stock raised for milk and meat. As a resource timber was used by early hominids as an energy source and then for shelter as technology became more sophisticated. Extracted minerals have replaced timber as a provider of shelter and this fibre is now directed in large volumes to the creation of paper. Most of humanity's energy is now provided by extracted fossil fuels that were largely unavailable before the industrial revolution.

The natural environment also affords considerable benefit to humanity by means that are not defined as provisioning. Natural systems regulate the habitat used by people by moderating microclimatic extremes (e.g. shade, shelter) and by controlling irruptions of pests, predators and disease carrying organisms that may impact negatively on people. It may also mitigate the risk of environmental hazards – coastal and riparian vegetation play's a clear role in protecting human settlements from floods and, as witnessed in 2004, tsunamis. Natural ecosystems also provide support to society that underpins the provision of food and water through the pollination of flowers that beget seed and fruit and the purification of water to mitigate the

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