



Foreword

As the second richest country of bio-diversity, Indonesia potencies have become a great gift for everyone who is eager to start and grow bio-pharmacy and natural cosmetics businesses. These potencies have boost up national jamu, industries development, and have supported many industries in several countries.

The Book of Indonesian Heritage: "Jamu for Health and Beauty comprises Indonesian bio-pharmacy potencies, bio-pharmacy industries growth in Indonesia, government supports and other useful pieces of information about the product of bio-pharmacy industries (Indonesia Herbal and Natural Product)

This book has adequate pieces of information for those who need to know and understand the opportunities and profits that can be gained from jamu and natural cosmetics business, from Indonesia- one of the greatest bio-diversity resources in the world.

On behalf of the Indonesian government, we to strongly encourage you to take the chance of great revenues that can be gained from this opportunity, by starting or expanding businesses on jamu.

Publishing Team
Publishing Team Coordinator
Director of Agriculture Product Processing

Ir. Chairul Rachman, MM



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The Indonesian Heritage Jamu for Health and Beauty

Publishing Team

Coordinator:

Ir. Chairul Rachman, MM
(Director, Agricultural Product Processing, MOA)

Authors:

Ir. Jamil Musanif
Prof. Dr. Latifah K. Darusman, MS
Dr. Ir. Nurliani Bermawie

Contributors:

Ir. Anastasia Promosiana, MS Dede Sulaeman, ST, M.Si Ir. Dwi Putri Yanthi Endang Listiawati, S.Si Erni Yuliarti, SP Ir. Gayatri K. Rana, M.Sc Harumi Mungilia Abidin, SPi, M.Si Ir. Mahpudin, MM Ofie Nidausoleha, SP, M.Si Drs. Sabar Hariandja, Apt. Ir. Woro Palupi PT. Air Mancur PT. Kimia Farma, Tbk. PT. Mahkotadewa Indonesia PT. Martina Berto PT. Mustika Ratu, Tbk. PT. Nyonya Meneer PT. Sido Muncul

Translator:

Hariwan Puja Wilapa, SS Joanne Pierce Kristine Tambayot

Layout:

Hasan Ali Prabowo, ST Muhammad Arif, SE

Photo cover:

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Message from
The Chairman of Industry & Trade GP Jamu

JAMU is an Indonesian terminology or language (Bahasa Indonesia) for Indonesian origin of herbal preparations. It has long been known for centuries, that since the olden days Indonesians use JAMU to cure illnesses, promote health and protect long lasting beauty. The prove of the facts can be traced back from many literatures such as SERAT CENTHINI, SERAT KAWRUH or even can be seen on the wall-carving at the BOROBUDUR TEMPLE.

JAMU as the formal and only association of jamu industry feels that "jamu" as an ancient art and tradition of "medicine making" should be preserved and further developed. Through Indonesian Chamber of Commerce (KADIN/Kamar Dagang Indonesia) is included as one of the industry to be prioritized and supported in the INDONESIAN INDUSTRY ROADMAP, because of its "WARISAN BUDHAYA" or heritage values. Beside the fact that it is rich in culture, JAMU is also in-line with the global lifestyle slogan of GOING BACK TO NATURE. And therefore in deed, it is attracting attention and sympathy from many people all over the world. In the future GP JAMU and the government in the related institution plan to work together further to boost JAMU as our export priority commodity. Within the association, GP JAMU, has developed programs to educate members to improve their existence, so that in the long run the industry does not diminish inside the modern world. We encourage members to do clinically tested products, so that JAMU can be considered to be having the same level of efficacy as modern medicines in the future. For smaller companies or home industries within GP JAMU, we herd them to form alliances among members so that they can have the power to do the same. Hopefully, with this track in line, "this ancient art" will stay on forever, and can be enjoyed by everyone from all over the world

GP JAMU gladly welcome the presence of THE INDONESIAN HERITAGE Jamu and Traditional Cosmetics book to enrich and contribute to the collection of herbal literature worldwide. A great appreciation from GP JAMU to the ministry of agriculture of The Republic of Indonesia for initiating the preservation of one of our country's greatest wealth.

Putri Kuswisnu Wardhani, MBA Chairman of Industry & Trade GP JAMU





The Holistic Care Philosophy of Health Wellness and Good Looking Through Long Life Heritage

The rich natural resources of Indonesia as the second megabiodiversity of the world, provides the strategic impact in the preservation of health, and appearance as what we see today. The philosophy of health, wellness and beauty has been passed from generation to generation, not limited only to certain kind of treatment, but conducted also in accordance to our tradition.

Indonesia is the philosophy of health, wellness and beauty, to be specially carried out throughout the woman's life cycle.

Inspired by the exotic and beautiful mistery based on The Royal Method of Surakarta Hadiningrat, that has bee passed from generation to generation. I have been conducting the precious in heritage with the rest of the world. The holistic care philosophy called "perawatan paripurna" consist of inner care by consuming "jamu" (Indonesia herbal supplement) and the outer care by applying the natural cosmetic. Jamu is an indigenous effreacions herb e.g., which consist of roots, tree banks seeds, fruits, leaves and flowers to improve wellness and mental acuity.

The optimum result could be gained if the treatment balances with the concept "Jiwa, raga & sukma" (body, mind & spirit).

- □ "Raga/body": using jamu is supposed to have a deloxifying effect maintain stamina and good looking appearance.
- "Jiwa/mind" allowing the mind to be calm and relax and free from stress and being positive thinking.
- "Sukma/spirit" improve the spiritual life enhance your will power your energetic activity and spirit in life, to support the concept of holistic care philosophy of health wellness and good looking.

I have been for 35 years dealing as a pioneer with the production of jamu and natural cosmetic presented in an efficient and practical way to be implemented distributed domestic and abroad.

The are \pm 500 item of jamu products and natural cosmetics to be exported over the counter and \pm 100 specific items of spa products for the use of Taman Sari Royal Heritage SPA which have been franchised to many countries in the world. The Indonesian concept of SPA business have been excepted every where and become a successful booming business in many countries the concept of the jamu therapy and treatments has been proven to be in line and relevant for the significant need for the busy and dynamic modern community to day.

DR. BRA Mooryati Soedibyo

Founder of Jamu and Traditional Cosmetic Company Chairman of Indonesian Spa Association





Message from
The Director General of Processing and Marketing of
Agricultural Products, Ministry of Agriculture

Jamu is one of the priority trade commodities from Indonesian agricultural and industrial products. This industries and trades have obtained great support from the Indonesian government for decades. The collaboration between industries and government has brought an enormous development, it gives significant contribution to the economic growth and people welfare.

Directorate General of Processing and Marketing of Agricultural Products implemented some programs to accelerate the development of Jamu industries and trade. Such programs are providing assistance, guidance and information dissemination in the area of Good Manufacturing Practices (GMP), implementation of quality assurance system, Clean Development Mechanism (CDM) and facilitating product promotion to domestic as well as international market. This book is published in an attempt to disseminating information to the Jamu relevant stakeholders.

I expect that you can gain a lot of useful information from this book, and for the Publishing Team, I convey my highest appreciation for their invaluable effort.

Jakarta, February 2008

Prof. Dr. Djoko Said Damardjati





Message from The Minister of Agriculture Republic of Indonesia



We should be proud of and praise the God for having granted our nation with huge bio-diversity, making Indonesia as the second largest host countries of the world's bio-diversity, with approximately 30,000 species. Out of those, nine hundred have been identified and well known to contain high medicinal value. They cover both domesticated and wild medicinal herbs that can be found in almost everywhere around the country.

Historically, Indonesia has been well-known as "spice island country". It is reputed to be a large producer of spices today. The trend of using the natural medicines, traditionally known as Jamu in global societies, both for maintaining health and curing particular diseases has been growing very fast in line with the rapid development of science and technology. Moreover the trend has been strengthened by the recent vast discovery of the efficacy and safety of the natural herbal products. The growing usage of herbal products has been a trigger for the recent people's growing awareness to go back to nature in securing their health. It is therefore, the use of natural cosmetics also increases the demand of medicinal herbs.

There is no doubt, medicinal plants as bio-pharmacy substance has bright prospects in the domestics as well as the world market. The bright prospect in domestic market has been indicated by the rapid growth in the number of herbal industries in the last decades, some of which even has big opportunities of become world exporters.

We should extend our sincere appreciation to those who have invented and developed advanced science and technology consistently dedicated for producing high quality herbal and cosmetic products to supply both domestic and international market.



The great acknowledgement and honor also forward to the parties who have involved themselves on the publication of "The Indonesian Heritage: Jamu for Health and Beauty". I truly hope that this book could be a significant source of information for stakeholders who have heart felt intention and commitment to support the development of Jamu especially in Indonesia.

Finally, let's join those who have been fanatic consumers of locally produced herbal medicine and cosmetics and be proud of being part of them.

Jakarta, February 2008

Minister of Agriculture The Republic of Indonesia

Dr. Ir. Anton Apriyantono, MS



Chapter I

HISTORY OF JAMU

Jamu is used for a complex mixture of herbs that is used as part of traditional healing and body-care. To trace back the origin of jamu is not easy. It was believed inherited from the Indonesian ancestors, dated back to the prehistoric times.

According to an expert in Javanese Linguistic, the term of "Jamu" originated from Javanese languange "jampi". "Jampi" is the word used in Javanese royalti (Kromo Inggil), which means healing, while "Jamu" is the word used mostly by the common people.

Historical evidences of utilization of herbs for medication and beautycare can be found in many cultural and art products, such as temple's relief, inscription stones, neolithic stones, paintings, manuscripts, etc.

1.1. Temple's Reliefs

Hindu culture and religion arrived in Indonesia at the first Century at the same time as the Budhism. These led to the development of many kingdoms such as Kutai, Mataram and Majapahit. The Hindu kingdom lived up to 16th century. It was since the Hindu period, our ancentors have the tradition of making and drinking jamu.

Some plants used in jamu and even the making of jamu were found depicted on the walls of ancients Buddhist and Hindu temples in Java as was found in Borobudur, Prambanan, Penataran and Sukuh. Borobudur was the Buddish temple built during the 8th-9th century while Prambanan was the Hindu temple built at the time of Majapahit during Sanjaya dynasty. In the relic of the Borobudur temple, a number of medicinal plants commonly used for making jamu such as *Aegle marmelos* (L.) Correa, *Antidesma bunius* (L.) Sprengel,



Borassus flabilifer L., Calophyllum inophyllum L., Datura metel L., and Syzygium cumini (L.) Skeels are found.



Figure 1.
One of the reliefs found on Borobudur temple shows the habit of dringking jamu

1.2. Inscription stone

The Hindu's culture and religion probably is belief to play a role in influencing people's knowledge on medication and the use of plants for health and beauty-care. It was belief since this Hindu period that Indonesian people started to make and drink jamu. This was prooven by the finding of the inscription stone "Prasasti Madhawapura" from the Hindu-Majapahit Era (1292-1478AD) which inscribed the profession of jamu maker which was called "Acaraki".



1.3. Stone Tools

Jamu makers during the ancient time used stone tools such as mortar and rubbing stones to grind plants by rubbing them. Grinding is applied to make powder and plant extracts. The neolihic stone tools used to make jamu during those period can be found in Javanese palaces, nasional musium in Jakarta and even in traditional market. To day the practice of making jamu using stone tools still continue. Jamu maker in rural areas grind plant material for jamu using stone tools especially to prepare jamu gendong, powder jamu, pills, etc.

1.4. Manuscripts

Indonesia's rich of bio-diversity and ethnics and their local wisdoms in the utilization of plants for health and beauty-care have been recognized since European conquered Indonesia. Many publication on the utilization of plants for health and beauty maintenance already appeared since 16th century: The first publication is Manuscripts inscribed in lontar leaf covered many aspects of human life, one of which was Usada lontar (Book of Healing) contained 15 chapters covers comprehensive references of traditional healing including the utilization of plants is written in 9911600. Afterwards many other books were published on the use plants for medication was made by Yacobus Bontius, a Portuguese explorers, published his work entitled "Historia Naturalist et Medica Indiae" in the year of 1627 which contained 60 drawings of Indonesia medicinal plants together with their descriptions and usage indication. Bontius was also the first person who published data on Java's medicinal plants in 1658.

In 1628-1702, Gregorius Rumphius- a botanical exper- who stayed in Maluku conducted investigations on Maluku's flora and fauna. His works were manifested in the "Amboinish Kruidboek" In addition to that, the book "Herbarium Amboinense" was the written document of the used of plants for healh maintenance, written by Rumphius, of within year 1741-1755. In 1816 Horsfield published the first monographs on the medicinal plants of Java.



Greshoff (1890-1914) published a book focusing on toxic plants and some with medicinal properties.

Kloppenburg-Versteegh published the book in Dutch "Indische Planten en haar Geneeskracht" (Indigenous Plants and their Healing Power) in 1907. It suggested ways on how to use medicinal plants grow around their homes for curing illnesses. In 1927 Heyne published his second edition of the book "Indonesian Useful Medicinal Plants". Heyne provided extensive information on medicinal plans that uses. Ave and Sunito 1990 and Bell and Van Houten in 1993 published books which provide information on other local traditional uses of plants for Siberut, and Central Seram respectively.

All of the publications mentioned above, described only the utilization of plants and some of the contains recipes. None of the books used the word jamu.

The original hand written manuscripts on the knowledge and formulatiom of "jamu" can be found in Surakarta and Yogyakarta Palaces. Two manuscripts were found in Surakarta Palace, "Serat Kawruh Bab Jampi-Jampi Jawi" (A Treatise on All Manner of Cures) was written in 1831. It contained 1166 prescriptions, 922 of which were jamu preparations and Serat Centhini (in javanese script), or called Suluk Tambanglaras or Suluk Tambangraras-Amongraga. Serat Centhini was believed to contain one of the most comprehensive references of medical treatments in ancient Java.

The other hand-written scripts in Javanese "Serat Primbon Jampi" (Handbook of Healing Formula) and "Serat Racikan Boreh Wulang nDalem" (Handbook of Mixing Medical Ingredients) contains jamu recipes for health and beauty treatments exclusively used by Javanese royalty.

Based on those manuscripts, jamu was belief to be originated from Javanese royalty, the word jampi instead of jamu was used in the manusripcts



found in in the Surakarta and Yogyakarta palaces. It was only after the knowledges more open to public, the word of jamu becomes common.

1.5. The Spread of Jamu

The knowledge of Jamu then spread to Bali, during Balinese colonization by the Majapahit Empire at 14th-15th century. The influence of Javanese can be seen on the manuscripts found on lontar leaf. The word 'lontar' is composed of two Old Javanese words, namely 'ron' (leaf) and 'tal' (rontal tree). The word 'rontal' therefore means 'leaf of the rontal tree'. The rontal tree belonged to the family of palm trees (Borassus fabellifer)".

From Bali the knowledge of jamu spread to many other neighbouring islands over the course of time. Islamic arrival in Indonesia, influenced people's knowledge on the use of plants for medication treatments. This influence can be eseen on a number of manucripts in Arabics such as found in KITAB TIBB and other Melayu's manuscripts.

1.6. Researches and Development

Research on medicinal plants conducted by Bogor Botanical Garden Research Center was published in a book of "Medical Book for Children and Adults" by E. Van Bent. The book contained the medication method by using natural herbs.

Researces on industrial crops which includeed medicinal and aromatic plants were done by the Establishment of Culturtuin or Garden for Cultivated Crops in 1876 at Cikeumeuh, Bubulak and Cimanggu Triangle (now Jalan Tenhtara Pelajar, Jalan Merdeka and Jalan Martadinata). This marked the initial research on commercial crops, which later developed as Research Centre of Estate Crops, wherein one of the research institutes was the Indonesian Medicinal and Aromatic Crops Research Institute (IMACRI). The



stone which marked the establishment of this research centre in 1876 was still preserved in Bogor.

From those infomations, the Colonial Period had contributed some initial researches on some of the medicinal plants found in Indonesia, especially in Java. Researches conducted during the Dutch colonial period were published on the book entitled "Formularium Medicamentarium Soloensis" which consisted of formulation of natural herbs useful for treatment of many kinds of diseases generally suffered by people at that time.

During the time of Japanese invasion and physical revolution, modern medicines were at its highest price and it was very difficult to get them. Finally, doctors were initiating to try some treatment from medicinal plants. This was probably the first record of the use of herbs by medical doctors for curing some illnesses in Indonesia.

1.7. Commercial production

The first record of commercial production of jamu was made by Jamu Iboe in 1910, followed, by Nyonya Meneer in 1913, Jamu Djago in 1918, Sido Muncul in 1940, Air Mancur in 1963, Martina Berto 1970 and Mustika Ratu in 1975. Their products were made for various purposes like after birthcare, beauty maintenance, cure of illnesses and relaxation. Therefore, jamu making companies remain very active there times. Jamu products are still in demand nowadays.

1.8. Seminars

The first seminar on jamu was organized at Solo in 1940 and followed by the formation of Indonesian Committee on Jamu in 1944. A seminar was conducted again in 1966, and in 1981, the book entitled "The Use of Medical Plants" was published.



Apart from that, several institues dealing with medicinal plants have been established since more than 50 years ago as well as the stablishment of National Working Group and Commitees on Indonesian Medicinal Plants. Since that time, numeros scientific meetings have been organized both at national or international level.

Concluding remarks

That informations given above clearly indicate that jamu has been part of Indonesian culture which was inherited from our ancestors since ancient times. Although "Jamu" was originated from Java, the practice of medication using herb have been practiced by many other ethnics around Indonesia. About 45 % of Indonesian inhabitants depended on Jamu for their health maintenance. Drinking Jamu has become the habit of many Indonesian, even from the childhood.

With the incerase of global awareness on natural products, jamu has developed into industries and adjusted themselves to the consumer's preferences and health regulation. Various kinds of products such as for inner and outer-beauty treatment, health maintenance and also to curing some illnesses have been produced and sold at both domestic and international market. Now, Jamu has been well-known all over the world as the brand for Indonesian natural products for health, beauty-care and relaxation.



Chapter II

BIO-RESOURCES POTENCIES IN INDONESIA

Plants utilization to curing various kinds of diseases has been widely known all over the world. Improvement of some science disciplines like chemistry, phytochemistry and pharmacology in the 19th century has opened wider opportunities of nature based medication development. Modern day living brings new development in any field which promote compfort and satisfaction to the majority. On the contrary, the rise of infectious and communicable diseases are unavoidable. These new diseases include HIV and some degenerative disease like coronary disease, kidney, liver, high blood pressure, urinary tract, cancer etc. Need long term simultaneous treatment. The long term use of modern medicines for those mentioned diseases, doesn't seem to be very effective. These kind of medications are usually very expensive These for most of the society members, Hence, the use of alternative medication using natural herbs is getting more popular nowadays.

Plants were formerly known as the raw material for medicinal purposes. However, the trend has changed. Herbal plants are no longer used only for medicines. Nowadays, it also used as health food (Nutraceuticals), traditional medicines, diet supplement, food ingredients, perfumary, fragrance, cosmetic, beauty treatment (Cosmeceuticals), coloring, detergent, bio-pesticide, personal care and toiletteries. Development of plants as herb and medicinal industry based product material with high market oriented commercial value has been widely researched and improved. This opportunity and potency will be further developed to make the country's natural resource as the pillar for the world prosperity.



2.1. Bio-diversity Potencies of Indonesia supports Biopharmaceutical Industry

Indonesia is a home with a rich assemblage of biodiversity and known as one of the world's center of animal, microbes and plant biodiversity. The International Union for Conservation of Nature (IUCN) ranks the country as second in the world in terms of species diversity and endemism. From such large biodiversity, it is reported that 10 % of the world flowering plant species, 12 % of mammals (515 species, 39 % are endemics), 16 % of reptiles (511 species, 30 % are endemics) and 210 species of amphibians 40 % are endemics, 17 % of birds (1531 species, 20 % are endemics), 25 % of fish, and 15 % of insects, microbes, fungi, algae and lichens are found in Indonesia. Among those, 350 000 species are animals and 10 000 species of microbes live in our ecosystems, one million out of 6 million insects in the world, 7000 species from 19 000 species of fish, 1 600 from 9 200 bird species, 12 000 fungi from 100 000, 1 500 from 11 300 ferns species, 100 gymnosperms from 530 and 300 species for bacteria and algae.

In terms of plant diversity, Indonesia possesses about 40 000 species, 55 % are endemics among which 7500 species are recognized as medicinal plants. Unfortunately, not all of them are well known, nor their potential are explored. About 1 845 medicinal plant species have been inventoried from several forests formations derived from 203 family, 940 species have been identified, but only 283 species are routinely used in jamu industries which are registered to NAF-DC and 250 species are directly harvested from forests.

Indonesia a is also a home for 370 ethnics who live in the nearby forest all over Indonesia. Each of them possesses their own local wisdom to utilize plants around them for health and beauty maintenance. By trial and error, our ancestors were able to distinguish herbal from poisonous plants. They even combined and formulated them by various processing ways to gain optimum



result. This made the herbal plants as a part of culture and has been inherited by the new generation as a valuable heritage.

These knowledges have been vastly developed over the years so that they become an industry of traditional medicine which are known as jamu and natural cosmetics

By experiences, many species of herbal and medicinal plants have been identified and proved to have good prospects to be developed as jamu and traditional cosmetic products. They are described below.

1. Immunomodulator

Processed food, air pollution and bad living condition may trigger the development of free radicals that lead to immuno deficiency. Many medicinal plants are reported to having immunomodulatory properties. *Phyllanthus niruri* L (seaside laurel), *Aloe vera*, *Andrographis paniculata* (creet), *Curcuma xanthorrhiza* (java turmeric) are some of the plants effective as immunomodulator.

2. Anti-inflammation

Some plants that have anti inflammation effect are turmeric, lempuyang (wild ginger), beetle leaf, Indian alangal, ginger, languas galanga, etc.

3. Anti-degenerative

Unhealthy life-style increases the prevalence of degenerative disease like hypertension, diabetes, heart, and liver diseases etc. Some of plants that can prevent them and even can cure them are creet (king of biter), javanonny, Java turmeric, turmeric, asiatic pennyworth, Javanonny, Tinospora and bastard chedar.

4. Anti-parasite

Unhealthy life patterns and bad living environment of most of people bring negative health impact. Filaria disease that commonly infect people are caused by worm like *Brugia malayi*, *B. timori* and *Wucheria bancrofti*. Some plants that are useful for the treatment of these



diseases are *Leucena leucocephala* (white lide), Tinospora, Creet, black turmeric (temu ireng), Rangoon creeper, etc.

5. Anti-infection

Infectious disease caused by pathogenic spores like *Candida albicans*, *Trichopyton mentagrophytes*, *Staphylococcus aureus*, *Pseudomonas aeruginosa and Microsporum canis* are commonly suffered by people in developing countries. For this reason, there is a need to develop new medicine with anti-infection effect. Some plants that are identified to have anti-infection effect are beetle leaf, seaside laurel, beluntas (Indian fleabane), and languas galanga, Tabat barito (*Ficus deltoidea*).

6. Anti-virus

Virus is related to many infectious diseases, such as immunosuppressive disease like HIV, hepatitis and cancer. There are plenty of plants that have anti-viral properties. Some of them are creet (king of bitter), seaside laurel (meniran), pasak *bumi* (Eurycoma longifolia Jack), beluntas (Indian fleabane), guava (Psidium guajava) etc.

7. Anti-cholesterol

Obesitiy is one of the main causes of heart attack, high blood pressure, diabetes, etc. Research conducted on various plants has shown that creet,turmeric ,java turmeric and bartar chedar (*Guazuma ulmifolia*) contain bioactive components with high resistance on fat synthesis and cholesterol. Bioactive components include creet, turmeric and java turmeric

8. Anti-oxidant

Processed food and air pollution can cause formulation of free radicals inside our body that may trigger early aging transformation and even cancer. Some of plants have been good anti-oxidant with has a lot of usage like anti aging, anti tumor, etc. They are turmeric, *Asiatic pennyworth*, javanonny, languas galanga, *Eugenia polyantha* (salam), tea and *Piper cubeba* (cubeb).



9. Anti-cancer

There are a lot of plants that have been widely known and utilized as anti cancer. There are zedoary (temu putih), Gynura pseudochina (china root), Phaleria fruit, Coleus leaf, rumput mutiara, *Solanum nigrum*, *Asiatic pennyworth*, *Seaside laurel*, *Typhonium flagelliforme* (keladi tikus), Javanonny, garlic, etc.

10. Cosmetics

Having a fine smooth and white complexion has become the newest trend of beauty. Many ways have been done to get whiter skin. Some plants that can whiten the skin are Yam bean (bengkuang), *Indian galanga* (kencur), Jasmine, Murayya and cashew leaf.

11. Functional food and beverage

To improve herbal product market, various herbal products have been developed not only for medicine and cosmetic, but also for health food. This food can be found easily in market in the forms of nutritious beverages (such as Java turmeric, sweet sour turmeric (Kunyit asam), *Asiatic pennyworth* (Pegagan), Sari Pace Madu, beras kencur, instant drinks, candies, etc.

2.2. Some major material for jamu and natural cosmetics industries in Indonesia

The use of jamu has been rooted in Indonesian culture. As what has been mentioned in the previous chapter, Indonesia is one of the richest countries after Brazil in bio-diversity. For about 30.000 species to 40.000 species of floras in the world grow in Indonesia. Of this figure, 26% of them or 7500 species has been cultivated and 940 species among those have been developed as a material for jamu and natural cosmetics.



The demand of jamu and natural cosmetics are growing each year in line with the increasing number of people who get conscious on healthy living using natural products.

With the increasing demand of jamu and natural cosmetics, the businesses of jamu or natural cosmetics are also expanding. Therefoer, this has lead to an increasing demand of raw materials needed by the manufacturing.

Some of the species that have been cultivated and developed as materials for jamu and natural cosmetics industries are java turmeric, ginger, turmeric, Indian galanga and wild ginger (lempuyang).

Aside from those species, some other herbal plant species that are also used as important material for jamu and natural cosmetics industries *are Phaleria fruit*, *Asiatic pennyworth*, creet, zedoary, *Elephan foot* (tapak liman) and others.

Briefly, below are the general descriptions, effectiveness and production centers of plant materials used by jamu and natural cosmetics industries:

1) Java Turmeric/Temulawak (*Curcuma xanthorrhiza* Roxb.)

Java turmeric belongs to the Zingiberaceae family. The java turmeric rhizomes have long been used in jamu. There are more than 40 health claims of java turmeric rhizomes in Indonesia. The rhizomes skin is dark brown in color with yellow flesh, with aromatic and bitter taste.





The rhizomes has been widely used as decoction (boiled jamu) to cure some diseases. Aside from being used usage as jamu or traditional medicine, Java turmeric extract (sari) can be used as an ingredient for traditional cake and beverage as well as natural coloring for food and cosmetics.

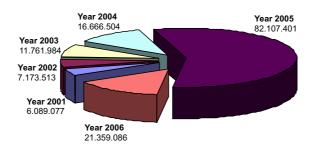
Java turmeric contains some chemical compounds such as fellandrean and turmerol, essential oil, camfer, glucose, and foluymetik karbinol. The rhizome contains 2-3 % of curcumin that is used as acnevulgaris (anti bacteria) aside from being anti-inflammation and anti hyphotoxic (anti gal toxic).

3-12% of volatile oil in the rhizome is believed to be effective in improving kidney performance as well as anti inflammation. On the other hand, java turmeric also contains 48-49,64% flour essence and 29-30% protein essence.

Some other benefits of java turmeric are anti acne, anti cholesterol, and anti cancer. It is also a good medicine to improve appetite, spleen treatment, kidney treatment, coroner heart, stroke, rheumatic, asthma, headache, stomachache, and lactagoge (increase production of mother's breast milk).

The trend of the expansion of harvest area and java turmeric production has been increasing in the period of 2001-2006, which is followed by a noticeable improvement in productivity.

Chart 1.1 Harvest area and production of java turmeric of Indonesia in 2001-2006





Java turmeric is the most common used plant in jamu ingredients. Cultivation area of java turmeric can be found in many parts of Indonesia, but the main production centers are in Central Java, Yogyakarta, East Java, West Java, Banten and Riau.

2) Ginger/Jahe (Zingiber officinale Rosc.)

Ginger belongs to the Zingiberaceae family. Ginger roots (rhizomes) have been used in jamu and is believed that it can cure many diseases. Furthermore, ginger rhizomes have been utilized also as ingredients in many other valuable products such as in traditional instant drink, pharmaceutical, cosmetic, food and beverages and essential oil industries.



There are 3 ginger varieties based on rhizomes size, shape and color, i.e, big white ginger locally known as Gajah ginger, small white ginger locally known as Emprit ginger, and red ginger or Sunti ginger.

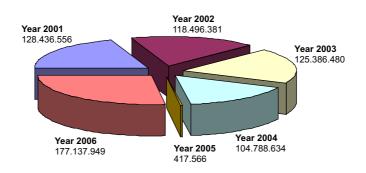
Big white and small white ginger has brownish white skin color with yellowish white flesh. Whereas the red ginger has a red skin color with whitish flesh. Ginger rhizomes root contains 2-4% volatile oil which consists of zingiberin, kamfena, limonene, borneol, sineol, zingiberal, linalool, geraniol, kavikol, zingiberen, zingiberol, gingerol, shogaol, dammar oil, essence, organic citrate, malat citrate, oksalat citrate and gingerin.

Pharmacologically, ginger rhizomes is good for carminative, anti vomit, muscle stiff, anti blood coagulation, sweat molt, anti inflammation, anti microbe and parasite, anti pyretic, anti rheumatic, and stimulator of stomach gum and gal gum production.



Ginger is one of the six most used plants in jamu industries. Harvest area and production number of ginger has shown a decreasing trend in the year of 2001-2006, but on the other hand the productivity has increased.

Chart 1.2. Harvest area and production of Ginger of Indonesia in 2001-2006



Cultivation area of ginger can be found in many parts of Indonesia, but the main ginger production is in Central Java, Yogyakarta, East Java, West Java, Banten, North Sulawesi and West Kalimantan.

3) Turmeric/Kunyit (Curcuma longa L.)

Turmeric also belongs to the Zingiberaceae family. Its rhizomes have been used in jamu and is believed to cure many kinds of illnesses. It is also as natural color and raw material for cosmetics.

Turmeric rhizomes is similar to java turmeric except that it is bitter, hot and contains more curcumin. Turmeric rhizomes skin is light orange in color with bright orange flesh.





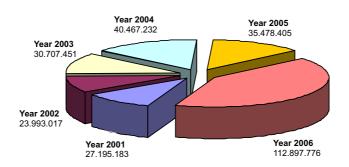
Turmeric has been used in jamu for healing wounds after birthcare, refreshment, blood cleanser, irritation treatment, and to reduce muscle stiffness. Other important benefit of turmeric is as spice used in many cooking recipes. It is also used inas an for antibiotic used in preventing diseases in animal husbandry.

Turmeric contains pharmacological active components such as volatile oil (fellendrene, sabinene, sineol, and zingiberen) and curcumiroid (curcumin and its yellow color derivative comprising of desmetoxicurcumin and bisdemetoxicurcumin).

Pharmacologically, turmeric is effective as anti inflammation, anti microbe, anti cancer, anti tumor. In addition, it can be a good cure to reduce cholesterol and fat, and blood cleanser.

To fulfill the demands of jamu and cosmetic industries, the harvest area has increased in the recent years. The trend of the expansion of harvest area and turmeric production has been increasing in the period of 2001-2006, which is followed by a remarkable improvement in productivity.

Chart 1.3
Harvest area and production of Turmeric of Indonesia in 2001-2006



Cultivation area can be found in many places, but the main center of production is in Central Java, Yogyakarta, East Java, West Java, Banten and North Sumatra.



4) Indian galanga/Kencur (Kaemferia galanga Linn)

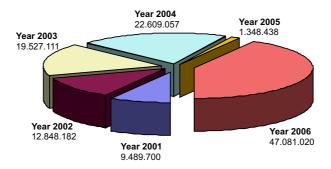
Indian galanga also belongs to of the Zingiberaceae family. Kencur is a small sized rhizome.

Part of Indian galanga that is commonly used in jamu is rhizomes. The rhizomes have shiny dark brown skin with white flesh inside. It contains 2.5 7% volatile oil which consists of borneo, meta-p-cumarate citrate, ethyl cinamate, ethyl-p-metoxy cinamate, p-metoksi cinamate citrate, cinamate ethyl ester citrate, perita decane, cinamat aldehyde and cafena. Aside from those concentrates of rhizomes contains narcotic effect that causes hallucinations.



Indian galanga rhizomes have been used in medications. It is effective as analgesic, carminative, and expectorant. Generally the rhizomes are used as puff of air molt, mucus/sniffles molt, diuretic, anti dandruff, blood pressure, asthma, headache, stomach supporter, cough appetizer, fever and malaria, body warmer, bone fraction, diarrhea, tetanus, stomach ache, toothache, eye irritation, etc.

Chart 1.4
Harvest area and production of Kencur of Indonesia in 2001-2006





Indian galanga is one of the most useful plants in jamu industries. The harvest area of this plant can be found mainly in Java Island, particularly Central Java, Yogyakarta, East Java, and West Java.

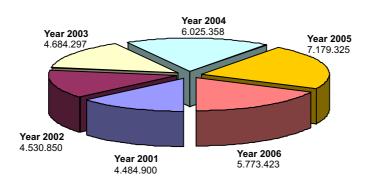
5) Aromatic wilg ginger/Lempuyang wangi (Zingiber aromaticum Val.)

Lempuyang wangi also belongs to the Zaingiberaceae family. This rhizome taste bitter, fibrous and has and aromatic effect.

Lempuyang contains volatile oil, zerumbon, koriofiler, kanfer, siniol, humuler, limonene, resin and sugar.

Lempuyang is effective for stomachache, breathing problem, severe cough, worm molt, gall pebble molt, stiffness colon irritation, cholera, malaria and rheumatism. It increases appetite and serves as iron supplement.

Chart 1.5
Harvest area, and production of Lempuyang of Indonesia in 2001-2006





6) Mahkota Dewa (*Phaleria macrocarpa* (Scheff) Boerl.)

Mahkota Dewa belongs to the Thymelaeceae family. It is a perennial shrub. Its height is about 1.5-2.5 m. Mahkota Dewa leaf is the most commonly used for treating illnesses. Its leaf is reported to be effective in incerasing libido, and curing, dysentery, allergy and tumor.

Mahkota Dewa can be easily identified through its fruit. The fruit consists of skin, flesh, sheel and seed. It has a round shape. It varies in sizes and shapes from orbicular to apple size. The skin colour is bright red.

Mahkota Dewa fruit is utilized as alternative medicines to cure cancer, diabetes,



nerve pain, kidney, disorder, liver dysfunction and skin diseases. It also helps reduce cholesterol level, stimulates stamina and is used anti narcotics.

The leaf and the skin of mahkota dewa contain alkaloid, saponin and flavonoid. Furthermore, the leaf contains polifenol. Dr. Regina Sumastuti, a pharmacologist from University of Gadjah Mada has proven that mahkota dewa has an antihistamin essence. This could be considered as an anti allergy. With this result, mahkota dewa is scientifically able to cure various allergies caused by histamine such as skin disease, irritation, sniffles, and breathing difficulties.

Dr. Regina has conducted a research which also proves that mahkota dewa can have a similar role as oxytosin and sintosinon. They could stimulate uterine muscle performance to ease birth process. Another research found that mahkota dewa fruit is an antioxidant and anticancer.



7) Daun Dewa (*Gynura segetum* (Lour.) Merr.)

Daun Dewa belongs to Asteraceae family. All plant parts can be used as herbal medicine. Daun dewa contains alkaloid, saponin, flavonoida, volatile oil, and tannin. Saponin and alkaloid have antioxidant properties.

Daun dewa leaf and tuber are useful for eliminating toxic elements, preventing cancer, and treating body system irritation. Its tuber contains the greatest valuable active compound.



8) Creet/king of bitter/Sambiloto (*Andrographis paniculata* (Burm.f) Ness)

Creet belongs to the Acanthaceae. All of its parts can be used as herbal medicines.

Sambiloto leaf contains volatile oil which is a good anti irritation agent. It also contains bitter taste of active compound andrographolide alkaloid and kalium. This plant has been shown to be effective as antiplatelet aggregates that can prevent blood coagulation. High concentration of kalium is good as diuretic. It helps water and salt secretion to help reduce blood pressure.



It is also effective an anti pyretic, anti toxic, and anti inflammation. This plant helps destroy trophocyt and trophoblast cells and helps tumor cells' pyknosis cytoplasm condensation to terminate cell nuclei. This herb is effective to cure infection and stimulating



phagocytosis. When this herb is consumed, the bitter and cold feeling will directly enter the heart and lungs. It can increase cellular body immunity and glands activity.

9) Asiatic pennyworth/Pegagan (Centella asiatica)

Asiatic pennyworth belongs to the Apicaceae family. This herb is in many jamu formulae. All parts of pegagan can be used as herbal medicines. The taste of pegagan is slightly bitter and fresh.

Asiatic pennyworth contains saponin, alkaloid, flavonoid, tannin, steroid, triterpenoid and glycosides.



Active principles found in asiatic pennyworth is asiaticoside, asiatic acid, madecasic acid, madecassoside, sitosterol, stigmasterol, vallerin, brahmoside, brahminoside etc. One hundred grams of asiatic pennyworth contains 34 calori, 8.3 g water, 1.6 g protein, 0.6 g lipid, 6.9 g carbohydrat, 1.6 g ash, 170 mg calsium, 30 mg Phosphor, 3.1 mg Fe, 414 mg Kalium, 6580 ug betacaroten, 0.15 mg thyamin, 0.14 mg riboflavin, 1.2 mg niacin, 4 mg ascorbat, and 2.0 g fibre.

Biological activitiy tests indicated that Asiatic pennyworth is effective as anti infection, anti toxic and anti pyretic. Its leaf can be used as astringent and toner. Pegagan is well known of its ability to revitalize exhausted body, women fertility. In addition it is good for circulation and revitalization of blood vessels.



10) Zedoary/Temu Putih (Curcuma zaedoaria, L.)

Temu putih root has bitter, hot and warm aromatic taste. It is one of medicinal plants that promote blood health and remove excess cholesterol. It is useful for revitalizing energy and effective pain killer.



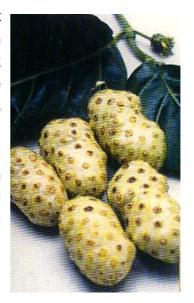
Temu putih has been widely used empirically in Indonesia for treating of many

kinds of cancer. Researches indicated zedoary can cancer cells by 78-86%. Curcuminoid and flavonoid serve as antioxidant that protects our body from cell destruction. Empirically temu putih has been used to increase libido, promote blood circulation, and boost appetite. It maintains the proper functioning of our respiratory and digestive systems. Furthermore, it cures worm infection, hemorrhoid, epilepsy, wounds and fever.

11) Java nonny/Indian mlberry/Mengkudu/Pace (Morinda citrifolia L.)

Mengkudu is an Indonesian wild plant that grows on lowland to upland with height of 1000 m above sea level. Mengkudu has shiny oval, thick and wide leaf. Its fruit is yellow green. When the fruit ripens, the it turns to dark yellow and secretes a bad smell.

Mengkudu contains some acethylester from Capron and capril citrate, morin-dadiol, and soranydiol. Acetil ester can be used as an antibacterial.





Mengkudu is used as jamu ingredient to cure influenza, sore throat, gum irritation, worms, dysmenorrhea, hip or waist pain and bruises. It aids in the prevention of diabetes mellitus and serves as anti narcotics. As an anti cancer agent, the application of javanonny extract on cancer cell lines prevent the growth of cancer cells.

12) Daun Salam (Syzgium polyathum (Weight.) Walp.)

Salam grows wildly in forests in mountainous areas or in the backyard of our homes. It is a perennial tree that grows as high as 25 m. It has dense oval leaves with sharp point. Salam leaf produces aroma when it is squeezed. Its flowers are white and have good smell. Salam has a very small fruit with astringent taste, green when young and turned red when mature. Its parts are used in medication.



Salam leaf contains chemical components such as 90.05% volatile oil which consists of sitral, eugenol, tannin, and flavonoide. It tastes rather stiff and aromatic. Empirically salam leaf has been used as antioxidants and anti diabetes. It lower high blood pressure and cures diarrhea.

13) Kapulaga (Amomum cardamomum Willd.)

Kapulaga is one of medical herbs with 1-2.5 m height, lanset shaped leaf (semi pointed leaf edge), circled rhizome with red-white colored meat, copsed flower, and green-red colored wood base.





Chemical essence contained in kapulaga such as atsiri oil, cineol, borneol and champor are useful for stomach ache, cough, breathing problem, stomach irritation and rheumatism. It increases one's appetite and is very useful for pregnant woment.

14) Kumis Kucing (Orthosiphon aristatus Bl.)

Kumis kucing an of herbal plants which grows of 1-2 m tall, It has square block branches, green violet color, alternative oval shape leaves. Its has terminaled flower shaped with bunch opening from branches' peak, flower bunches height is between 7 to 29 cm, small sized flower with white or violet white color, top of its crown covered by violet short hair.



Kumis kucing contains kalium salt, saponin, sapofonin, alkaloid, atsiri oil,

arthosiponin glucoside, tanin, organic acid, glicolic. It is useful for madical herb especially for diabetes, kidney trouble, stiff muscle, and cough.



Chapter III

JAMU INDUSTRY DEVELOPMENT

Indonesia is formerly known as "Spice Island Country" for producing spices the world since for many centuries.

Maluku (one of the province in Eastern Indonesia) is famous of cloves and nutmegs, Lampung and Bangka Belitung for pepper, West Sumatera for cinnamon, and Bali and Lampung for vanilla. Spices are generally used for food ingredient, food and beverage industry materials, modern and traditional medicines (jamu), cosmetics and cigarettes.

The knowledge of jamu is inherited from Indonesia ancestors. Document of jamu that remains can be traced backed to the period when Rumphius, a botanical expert of around the year of 1775, wrote in his book "Herbaria Amboinesis". In addition, research on jamu conducted by Bogor Botanical Garden research center was published in a book of "Medical Book for Children and Adults" by E. Van Bent. The book contains medication method using natural herbs.

In the Dutch colonial period, Yacobus Bontius published a work titled "Histiria Naturalist et Medica Indiae" in the year of 1627 which contains 60 paintings of Indonesia's medicinal plants together with their descriptions and uses.

Then, in 1628-1702, Gregorius Rumphius who stayed in Maluku conducted investigations on Maluku's flora and fauna. His works were manifested in the "Amboinish Kruidboek" and "Herbarium Amboinense".

First seminar on jamu was organized at Solo in 1940 and followed by the formation of Indonesian Committee on Jamu in 1944. Seminar on jamu



was conducted again in 1966, and in 1981, a book entitled "The Use of Medical Plants" was published.

The Colonial Period had contributed some initial researches on the variety of medicinal plants. Furthermore it resulted on the knowledge that some varieties that have therapeutics value such as jave tea (*Orthosiphon aristatus*), java turmeric (*C. xanthorrhiza*), turmeric and *Alstonia scholaris* (babakan pule), etc.

In the time of Japanese invasion and physical revolution, modern medicines were at its highest price and it was very difficult to get them. Finally, doctors were initiating to try some treatment from medicinal plants.

The habit of using natural herbs for various purposes existed since the ancient kingdoms era. There were even recipes specially made for beauty treatment, health maintenance and to cure some illnesses. At that time, those recipes were strictly kept as secret, but the pieces of infomation were passed onto their successors.

Results from researches conducted during the Dutch colonial period, the book titled "Formularium Medicametarium Soloensis" was published. It contains formulation of natural herbs useful for treatment of many kinds of diseases generally suffered by people at that time.

The utilization of natural medicine started since a long time ago. It is known as Jamu or Traditional Jamu, used for both health and beauty maintenance. The trends of using jamu, has increased lately. This is supported by the development science and technology, especially in extraction and formulation techniques, as well as enormous support for improving quality, safety and efficacy studies and research of the advantages of natural herbs and natural cosmetics.



3.1. The Jamu Industry

In accordance to Indonesia Health Minister Decree No. 246/MenKes/Per/V/1990 regarding Traditional Medicine Industry Authorization and Traditional Medicine Products Registration, traditional medicine industry is divided into several categories.

(1). Large/Middle Scale Industry Industry which is able to produce traditional medicines with total assets of above Rp. 600.000.000,-, excluding land and building, and employed more than 100 persons. Example are Jamu Air Mancur, Sido Muncul, Jamu Jago, Nyonya Meneer, Mustika Ratu, Martina Berto, etc.

- (2). Small Scale Industry
 Industry which is able to produce traditional medicines with total assets below Rp. 600.000.000,-, excluding land and building.
- (3). Self Formulating Blended Jamu Entrepreneurship
 Work of preparing, mixing, formulating or processing of small scale
 traditional medicines in the form of sliced herbs, flour, liquid, pills,
 tablets or parem and sold in a place without trade brand.
- (4). Back Carried Jamu.

Work of preparing, mixing, formulating or processing of small scale traditional medicines in the form of liquid, pills or parem and sold directly to consumers without marks or trade brand.

The number of Indonesia middle/large scale industries in the year of 2000 had reached 78. It increased in 2006 and became 81. On the other hand, the number of small scale industries in 2000 is 608, and it increased in 2006 up to 743.



3.2. Jamu Trade Development

Indonesia has relatively high market potencies for Jamu. It can be seen in the increasing medicinal plant material demands both nationally or internationally; constant increase of natural medicine industries growth; increase number of communities medicinal plant consumption; and a balanced supply and demand of medicinal plant materials.

Leading medicinal plants commodities are the ones with high economic value, big market opportunity, high production potency, and possible to be developed technologically. Demands on these commodities have been increasing constantly in line with the changes of consumer tendencies from chemical drug to natural medicines. These changes may be due to the eincrease of consumers awareness on the harmful side effects of synthetic medicines.

Indonesia has a great opportunity of natural and traditional medicine development. The indicators of this opportunity can be found on the present situation of small market share of natural medicines which give opportunities to develop this market. Other indicators can be seen from the number of Indonesian people consuming natural products, the change in lifestyle to back to nature pattern and then efforts to preserve our ancentors heritage.

National bio-pharmacy market potencies

Local bio-pharmacy demands have been growing inline with the increasing number of jamu, pharmacy and cosmetic industries. This number of industries and varieties of their products, supported by the specific ecology and topography in each province in Indonesia, keeps rising every year.

Nearly all varieties of bio-pharmacy are essential for Indonesia traditional medicine industries as material to produce jamu/traditional



medicine. However, there are some of those varieties needed in large amount by industries such as ginger (*Zingiber officinale Roxb.*) with the requirement to reach about 5000 tons per year. Table 2.1 below showed the detailed information.



Table 2.1. Indonesia Jamu Industries demand on various medicinal plants

No.	Commodities	Demand/year	Industries/Producers
1	Ginger (Zingiber officinale Roxb.)	5000 ton	All industries Sidomuncul: 15 ton/month Air Mancur: 15 ton/month Temu Kencono: 10-12 ton/month Indotraco: 40 ton/month
2	Kapulaga (Ammomum cardamomum Auct.)	3000 ton	All Industries Sidomuncul: 10 ton/month Nyonya Meneer: 10 ton/Month Indotraco: 20 ton/month
3	Java turmeric (Curcuma xanthorrhiza Roxb.)	3000 ton	All industries
4	Fennel (Foeniculum vulgare Mill.)	2000 ton	All industries
5	Indian galanga (Kaemferia galanga L.)	2000 ton	All industries Sidomuncul: 7-8 ton/month Temu Kencono: 5-8 ton/month Indotraco: 200-300 ton/month Herba Agronusa: 40 ton/year
6	Turmeric (Curcuma domestica Val)	3000 rhizomes ton (symplicia) 1500 fresh rhizomes ton	All industries Sidomuncul: 6 dry ton/month and 5 wet ton/day
7	Bangle (Zingiber purpureum Roxb.)	300 ton	Sidomuncul : 5-7 ton/month Air Mancur : 2-3 ton/month
8	Jati Belanda (Guazuma ulmifolia L.)	300 ton	Indofarma : 8-12 ton/month Sidomuncul : 2-3 ton/month
9	Lempuyang (Zingiber zerumbet R.)	200 ton	Sidomuncul : 15 ton/month
10	Daun Sembung	100 ton	Sidomuncul : 2-3 ton/month
11	Daun Sendok (Plantago major)	100 ton	Sidomuncul : 2-3 ton/month
12	Pegagan (Centella asiatica L. Urban)	100 ton	Sidomuncul : 2-3 ton/month
13	Daun Tempuyung (Sonchus arvensis)	70 ton	Sidomuncul : 2-3 ton/moth Dayang Sumbi : 1-5 ton/year



No.	Commodities	Demand/year	Industries/Producers
14	Clove (Syzygium aromaticum L. Merr. et. Per.)	50 ton	Sidomuncul: 3-4 ton/month
15	Greges Otot	50 ton	Sidomuncul : 2-3 ton/month
16	Sauropus androgynus	50 ton	Indofarma: 1 ton/month
17	Kunci pepet (Boesenbergia pandurata R.)	30 ton	All industries
18	Purple Leaf	30 ton	Sidomuncul : 1-2 ton/month
	(Graptophyllum pictum (L) Griff.)		Indofarma : 1-2 ton/month
19	Sidowayah	30 ton	Sidomuncul : 2-3 ton/month
20	Tapak Liman/Elephan foot (Elephantopus scaber)	25 ton	Sidomuncul : 2-3 ton/month
21	Kumis Kucing Java tea (Orthosipphon aristatus)	20 ton	Jamu Jenggot : 200 kg/month Dayang Sumbi : 5-10 ton/year Sidomuncul : 200 kg/month
22	Kayu Angin/Rasuk Angin (Usnea missaminensis)	15 ton	All industries
23	Waron	10 ton	All industries
24	Kemuning Leaf (Murraya paniculata Jack.)	10 ton	All industries
25	Kayu Secang (Caesalpinia sappan)	3-4 ton	All industries



International bio-pharmacy market potencies

Indonesia is well known as the second greatest biodiversified country with 30 000 flowering plant species, 7000 of which are medicinal plants. Aside from that, Indonesia also have rich local ethnics with traditional knowledge in utilizing plants for health and beauty maintenance. Its biodivesity and local knowledge are invaluable national assets which are needed to be explored and exploited for the prosperity of the country.

Phenomenon "back to nature" has increased attention globally to consume natural products so that the demand on food, drinks, medicines increase tremendously. The world market for natural products in year 2000 reached US\$ 43 billion and increased to US\$ 68.6 M billion in 2004. Indonesia has prospect and potential to become global player in natural products such as jamu and natural cosmetics.

Based on Corinthian Infopharma Corpora (CIC) in the year 2000, traditional medicine consumption (jamu) is increasing with growth average 5.4% per year. Consumption of traditional medicinal plant in Indonesia is believed to keep increasing, with regard that Indonesian tradition and culture are strong in the the usage of jamu as treatment (curative), physical health maintenance, preventive action and physical condition rehabilitation. The increasing of jamu consumption comes from people alteration tendencies to get back to nature alternative medication for the reason that it would have less side effects compared to synthetic ones. Agency for Drug and Food Inspection (2001) stated that the national and global consumption of traditional medicine will continue to increase. Some of jamu materials and products also have become reliable export commodities to boost up national income.

Medicinal plant export data based on export target country shows that Hongkong is the main target market of Indonesia commodities in medicinal plant considering its highest import value from Indonesia, even if the number



fluctuates each year. Indonesia export average to Hongkong can reach 730 ton medicinal plants each year which worth USD 647 thousand. Germany is the third largest export target with average export value per year reaches 155 ton similar to USD 112.4 thousand. Other export targets are Taiwan, Japan, Republic of Korea, and Malaysia. Based on CIC (2000), global consumption and export of these commodities are increasing around 20.96% per year, similar to USD 5.34 million.



Chapter IV

GOVERNMENT SUPPORT

4.1. Research and Development

Fast development of traditional medicines (jamu) and natural cosmetics industries in the downstream sector, followed by the enlargement of upstream sector which provide the industry materials, has been undoubtedly supported by research and development conducted by government agencies, universities and industrial sectors. This has brought a clear encouragement for the development of bio-pharmacy in Indonesia. Some of the results are development of medicinal plants cultivation to improve the quality of fresh, safe and environmental friendly products; technology of industry material preparation; processing technology; mechanizing industry; and research in the usefulness and usage of various natural products.

There are various medicinal plants that have been studied such as kunyit, temulawak, cabe jawa, sambiloto, mengkudu, pegagan, purwoceng, etc.

4.2. Extension and Public Assistances

Indonesian government has pledged a serious effort in giving assistance to medicinal plants cultivation development and bio-pharmacy industries. It is shown by the formation of special division that handles medicinal plants cultivation development in Directorate General of Horticulture, Ministry of Agriculture. Moreover, Directorate General of Agricultural Products Processing and Marketing has special sections that specifically deals with bio-pharmacy products processing and marketing as well as developing organic farming especially for medicinal plants.



In developing bio-pharmacy educational assistance system, training office of medicinal plants has been founded under Agency of Agricultural Human Resources Development of Ministry of Agriculture.

A special division that particularly deals with bio-pharmacy industry assistance exists in Ministry of Health and Agency of Food and Drugs Inspection.

Province and district governments also have formed special units attached on agriculture service office, health service office, and body that specially handle assistance to bio-pharmacy development on the field.

4.3. Standardization and Surveillance

In order to protect consumers from false usage of traditional medicines and cosmetics in Indonesia, as well as to improve industries' competitiveness, the Indonesia government has implemented national standardization which is chaired by National Standardization Agency, and consistent surveillance system conducted by Food and Drugs Surveillance Agency. National Standardization System including quality management and food safety is implemented to all production starting from fresh materials production system until final products of industry. Quality certification system is implemented in accordance to GAP, GMP, HACCP, ISO-9000 and CODEX standards.

Observation of traditional jamu and cosmetic products, Food and Drugs Surveillance Agency forms inspection offices which reach districts level in Indonesia. The coverage of their duty comprises:

- a. formulation and socialization of regulation and standard
- b. pre-market evaluation of products
- c. production and distribution equipment inspection
- d. sampling and testing
- e. production equipment certification



- f. material and product certification for export import
- g. labeling and commercial information inspection
- h. side effects surveillance
- i. public warning and KIE authorization, and
- j. law enforcement including investigation.

That specially handle assistances of bio-pharmacy development on the field.



CHAPTER V

SOME SAMPLE OF JAMU PRODUCTS OF INDONESIA





A. JAMU



ASIFIT CAPLET

REG. NO.: SD 051 520 381
Package: Bottle Of 30 Caplet
Assisting to increase breast milk

Composition:

Sauropus androgynus Vitamin B12, Vitamin B6, Vitamin B2, Vitamin B1

Usage:

Assisting to increase breast milk

Dosage and Administration:

1-2 caplets, 3 times daily

Storage:

Store in cool and dry place, protect from light.

Producer:

PT. Kimia Farma Tbk.
Jl. Veteran No. 9,
Jakarta Pusat
Telp. +61-21-384 7709, 348 34261
INDONESIA

BATUGIN ELIXIR

NO. REG.: TR 981 694 441

Composition:

Extract of Sonchus arvensis folia. Extract of Strobilanthus crispus folia.

Action: to help shedding kidney and urinary stone, and that could improve urinary.

Dosage and direction: Treatment: 30 ml of elixir (one cup), 3-4 times daily. Prevention and maintenance dose (after the stones have been pushed out): 30 ml of elixir (one cup) once a day. It is suggested to drink a lot of water during treatment.

Producer:

PT. Kimia Farma Tbk.

JI. Veteran No. 9, Jakarta Pusat Telp. +61-21-384 7709, 348 34261 INDONESIA









BENKWAT

DEPKES RI NO. TR 931367692

Certificate GMP From BPOM/NADCF and
Certificate Halal

Composition

Ginseng extracts, Cola Semen extracts, Coptici fructus extracts, Zingiberis rhizome extracts, Piperis nigri fructus extracts, Boesenbergiae rhizome extracts

Package:

Catch Cover content 1 Strip Aluminum foil @ 4 Capsules.

Usage:

Traditionally used for Increases stamina, Strength for men, Sexual endurance, Satisfaction between husband and wife

Direction and administration : Initial dosage in 2-3 weeks :

2 capsules daily, take one in the morning and one in the evening, 1 hour before meal

Maintenance dosage:

2 capsules daily, 1 hour before meal

Producer:

PT. Air Mancur, JI. Raya Solo Sragen Km 7 Palur - Solo, INDONESIA Telp. +62-271-825 024



(Rice & Galanga Juice)

Composition : Kaempferiae Rhizoma, Saccharum Coconut, Amylum Oryzae, Tamarindi Pulpa, Water

Action: Helps to treat coughs and hoarseness. Helps to reduce fatigue

Producer:







BIOTENS

Action: Biotens is made of extract Ginurae Folium, Centellae Herb, Garlic, Ortosiphonis Folium and Apii Folium. Ginurae Folium is mostly known as daun dewa. It is believed that this extract has an ability to decrease systolic and diastolic blood pressure. Centella Herb or pegagan is believed to be able to fix the circulation and vena blood artery. The compositions of Biotens are obtained from natural material. It is scientifically proven by ISO 17025 standardized laboratory that they synergic activity is able to slowing down blood pressure. Biotens can be consumed together with other treatment medicines...

Dosage and Direction of use: Consume 1 capsule three times a day.

Producer:

PT. Sido Muncul JI. Cipete Raya No. 81 Jakarta Selatan, INDONESIA. Telp. 62-21-7653535

POM TR 043330481



CENGKEH NATURAL MOUTHWASH (Antiplaque Clove Mouthwash)

Composition: Purified water, Xylan hemicellulose, Eugenia caryophyllata Oil, Mentha spicata Oil, Mentha piperita Oil, Caramel

Action: Againts bacteria causing molded plaque,

bad breath and caries

Direction for use: Pour one capful of the essence. Rinse mouth for 30 seconds and spit out. Do not swallow

Producer:





DIABMENEER CAPSULES

POM RI No. TR. 032320191

Composition:

Pterocarpi folium, Momordica fructus, Phaseoli fructus

Action: can assist to reduce blood glucose concentrate

Dosage and direction: 3 capsules, once daily

after meal

Producer:

PT. Nyonya Meneer Jl. Raden Patah No. 191 199 Semarang 50128,Indonesia



DAUN SIRIH NATURAL MOUTHWASH

ANTISEPTIC - MOUTHWASH

Composition: Purified water, Xylan hemicellulose, Piper betle Extract, Mentha spicata Oil, Mentha piperita Oil, Cl 42090

Action: Protect from bacteriae which cause caries,

bad breath and to maintain healthy teeth

Direction for use: Pour one capful of the essence. Rinse mouth for 30 seconds and spit out. Do not

swallow

TOOTH PASTE

Composition: Extract of Piperis Folium and

mineral flouride

Action: Prevents and treats tooth decay and

gums

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4 Ciracas,
Jakarta Timur 13740 - Indonesia





ENKASARI

Composition: Each 45 ml of liquid contains: Abrus precatorius folia extract equivalent to dried leaves powder Piper betle folia extract equivalent to fresh leaves. Liquiritiae radix extract equivalent to dried root powder. Mentholum.

Action : To relieve mouth ulcer causes. To prevent super infection (additional infection). - To make mouth fresh. To relieve bad breath and pain that caused by mouth ulcer

Dosage and direction: Adults: 45 ml liquid (=3 tablespoonful @ 15ml) 3 - 4 times daily. Children: 15 ml liquid (=1tablespoonful @ 15 ml) 2 times daily. Drug should be gargled and swallowed.

Producer:

PT. Kimia Farma Tbk.

REG. NO: BTR 001 600 071



ESeMag

Ese Mag contains of C.Longa and M. paradisiacal that are able to neutralize stomach acid and to treat irritation inside the stomach in order to ease the pain. Stomach ache can be caused by exceeding production of stomach acid that effected on irritation of stomach inner surrounding. This will give a great pain. EseMag is able helping to heal that irritation.

Action: Maintaining the best condition of processing and absorbing process of our body. **Dosage and Direction of use:** Consume 1 capsule three times a day before / after eating and sleeping, or under physician direction.

Producer:

PT. Sido Muncul Jl. Cipete Raya No. 81 Jakarta Selatan, INDONESIA. Telp. 62-21-7653535

POM TR 052347951





FATRAPER

POM SD. 021 303 121

Action: Fatraper is good as a supplement to reduce cholesterol intensity and fat level in the blood and body, also to reduce body weight. Furthermore, this product is also good for stabilizing cholesterol intensity in the blood.

Dosage and Direction of Use: Consume a capsule three times a day before dinner regularly. Dosage of blood cholesterol stabilizing: Consume 1 capsule prior to eating high fat level food. Dosage of weight reducing:Consume a capsule three times a day regularly for two months. For best result, it is encouraged to have regular exercise and keep your food consuming under 2000 calories a day.

Producer:

PT. Sido Muncul Jl. Cipete Raya No. 81 Jakarta Selatan, INDONESIA. Telp. 62-21-7653535



GULA ASAM

(Tamarind Juice)

Composition: Tamarindi Pulpa, Palm Sugar, Cinnamomi Cortex, Water

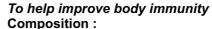
Action: Helps to keep the body health and fresh. Helps to make the body slim and improve digestion system

Producer:





REG. NO.: SD 031 507 681 Package: Bottle Of 30 Caplet



Conc. *Echinaceae* Herba Extract, Conc. *Morindae* Fructus Juice, Conc. *Phyllanthi* Herba Extract, Vitamin B1, Vitamin B6, Vitamin B12



To help improve body immunity

Dosage And Administration:

2 caplets twice daily

Storage:

Keep in a cool and dry place, protect from light

Producer:

PT. Kimia Farma Tbk.

Jl. Veteran No. 9 Jakarta Pusat Telp . +62-21-3847709

JAMU SEHAT PEREMPUAN

DEP KES RINO. TR: 771 217 231

Composition:

Each one sachet contains:

Coriandri fructus, Retrofracti fructus, Colae semen, Gallae, Curcumae domesticate rhizoma, Zingiberis rhizoma, Zingiberis aromaticae rhizoma, Curcumae rhizoma, Zingiberis purpurei rhizoma

Packaging: Sachet@7g

Certificate GMP From BPOM/NADCF and

Certificate Halal from MUI

Usage:Traditionally used for general health and to

improve digestion.

Dosage and administration:

Mix the contents of one sachet with ½ glass (100 ml) of boiling water. Take 3 4 sachet every week. If necessary one sachet once daily.

Producer:

PT. Air Mancur, Jl. Raya Solo Sragen Km. 7 Palur - Solo, Central Java, Indonesia. Telp. +62-271-825024









GINASIH (Intimacy Care)

Composition : Piperis bettle Folium. Andrographidis Herba. Plucheae indicae Folium. Achileae Herba.

Action: Prevents vaginal discharge (Fluorus Albus). Reduces excess mucus. Reduces unpleasant odour. Prevents and cures vaginal irritation

Direction for uses: Pour 5 caps of Ginasih into 500 ml warm water

Use it as vaginal wash: during and after menstruation. post delivery before and after intercourse for daily hygiene

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4 Ciracas,
Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291; Fax. 62-21-8711248





Composition: Galian Parem Wangi (Foeniculi Fructus, Alyxiae Cortex, Coriandri Fructus, Cubebae Fructus, Caryophylli Flos, Myristicae Semen, Ligusticae Radix, Amomi Fructus, Sintox Cortex, Burmani Cortex, Baekeae Folium, Isorae Fructus, Usneae Thallus, Pluchae Folium) Pulih Balung Sumsum (Amylum Oryzae, Kaempferiae Rhizoma, Curcumae domesticae Rhizoma, Nyctanthi Flos, Parameriae Cortex, Tamarindi Pulpa, Sauropii Folium, Maranthae Tuber, Curcumae Rhizoma, Retrofacti Fructus, Maoutiae Folium, Erythrinae Folium) Bubuk Bancar Air Susu(Ipomea Herba, Curcumae Rhizoma, Burmani Cortex, Sauropi Folium.). Tapel Raket Mustika Sejati (Cyperi Rhizoma, Cubebae Fructus, Alyxiae Cortex, Rhei Radix). Pilis Wangi (Alyxiae Cortex, Nigellae sativae Semen, Cubebae Fructus, Coriandri Fructus). Parem Segar Sumyah (Foeniculi Fructus, Alyxiae Cortex, Coriandri Fructus, Cubebae Fructus). Minyak Kayu Putih (Oleum Eucalypti). Minyak Telon (Oleum Cocos, Oleum Eucalypti, Oleum Foeniculi).

ACTION: Galian Parem Wangi (Helps increase mother's breast milk and makes the body fresh) Pulih Balung Sumsum (Maintains mother's healthy, helps reduce fatigue and makes the body fresh) Bubuk Bancar Air Susu (Accelerate and increase the volume of mother's breast milk) Tapel Raket Mustika Sejati (Discherge impure blood from abdomen, make it small and tighten the muscles) Pilis Wangi (Treatment for your eyes to make them clean and shining) Parem Segar Sumyah (Take care of your body to make it healthy and stay young) Minyak Kayu Putih (Subside stomachache and can be used with tapel raket by adding a squeeze of lime and a bit of kapur sirih) Minyak Telon (Rub over the baby's stomach to prevent it from sickness)

Producer:







Kunyit Asam was first formulized in keraton. Empirically, kunyit and asam are good for women period time, skin smoothing, fat lessening, metabolism and food processing maintaining and removing bad body odor. Curcuminoid inside Kunyit Asam has the function of anti oxidant that is able to protect our body from free radicals.

Action: Removing bad body odor, helping women period process, maintaining body shape and body refreshing.

Dosage: Consume a pack everyday or as required.

Producer:

PT. Sido Muncul Jl. Cipete Raya No. 81 Jakarta Selatan, INDONESIA. Telp. 62-21-7653535

POM TR 001 210011



KUNIR ASAM

(Tumeric & Tamarind Juice)

Composition : Curcuma Domesticae Rhizoma, Tamarindi Pulpa, Zingiberis Rhizoma, Kaempferiae Rhizoma, Cinnamomi Cortex, Saacharum Coconut, Fructosa, Water.

Action: Helps to improve blood circulation. Helps to abate oral ulceration, swollen abdomen and colic. Helps to maintain healthy digestion system.

Producer:







Composition: Sonchi Folum. Zingiberis purpurei Rhizoma, Tamarindi Folium, Guazumae Folium,

Action: Lowers and normalizes cholesterol level. High cholesterol level will increase the risks of Arteroschlerosis, which is the thickening and weakening of the artery walls, one of the causes of coronary heart disease.

Direction to use: Drink Regularly 3 times a day. Put tea bag in a cup of boiling water, for faster result and colour, dip tea bag a couple of times in the cup.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248

MAHKOTA DEWA EXTRACT **CAPSULES**



POMTR 033 329 721

Certificate: Halal, POMTR, HACCP, Irradiation

Composition

Phaleria macrocarpa extract, Amylum

Package:

30 capsules @385 mg in plastic bottle and carton box.

Usage:

Traditionally being used in tumor treatment.

Dosage and administration:

Prevention : orally taken, one capsule once

Treatment : orally taken, one capsule three

times a day

Producer:

PT. Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia



MADECA CAPSULES

POMTR 053 353 681

Certificate: Halal, POMTR, HACCP, Irradiation

Composition:

- Phaleria macrocarpa Pericarpium

- Gynura procumbens Herba

- Curcumae zedoaria Rhizoma

Curcumae alba Rhizoma

- Curcumae Rhizoma

- Cantellae Herba

Package:

30 capsules @380 mg in plastic bottle & carton box **Usage:**Traditionally being used in cancer treatment.

Dosage and administration:

Prevention : orally taken, one capsule once

daily

Treatment : orally taken, one capsule three

times a day

Producer:

PT Mahkotadewa Indonesia JI. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia

MADEDEM CAPSULES



Certificate: Halal, POMTR, HACCP, Irradiation

Composition:

Package: 30 capsules in plastic bottle @380 mg

and carton box.

Usage:

Traditionally being used in Diabetes mellitus

treatment.

Dosage and administration:

Prevention : orally taken, one capsule once

daily

Treatment : orally taken, one capsule three

times a day

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia







MADETENS CAPSULE

POMTR 063 361 861

Certificate: Halal, POMTR, HACCP, Irradiation

Composition:

Package: 30 capsules @380 mg in plastic bottle

and carton box.

Usage:

Traditionally being used in the treatment of

hypertension symptoms. **Dosage and administration:**

Prevention : orally taken, one capsule once

daily

Treatment : orally taken, one capsule three

times a day

Producer:

PT Mahkotadewa Indonesia JI. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 Indonesia



(POMTR 053 243 321)

Composition

Camellia sinensis, Centella asiatica, Angelica keizkei koidzmi, Phaleria macrocarpa, Gynura

segentum

Type: Tea in tea bag

Package: Tea bag, Aluminum foil, Box

Content: 25 bags @ 2 g

Certificate: Halal, POMTR, HACCP, Irradiation

Usage:

This tea is very rich of beta carotene and antioxidant It's good to maintain health keep your body metabolism in balance and increase your

immunity

Dosage and administration:

Put a tea bag in 250 cc boiled or hot water for 3 - 5 minutes, you may add sugar or Mahkotadewa

Honey drink while it's warm

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia Tel. (62 21) 4302762 / 4392229

Fax.: (62 21) 43938420

Website: www.mahkotadewa.com









MAHKOTA DEWA HONEY - HONEY WITH HERBS

POMTR: 053649 111 Composition

Mel deperatum, Phaleria macrocapa, fructus,

Centellae asiatica folium

Curcumae rhizoma

Type: Liquid

Package: Bottle, Box

Content: 100 ml Certificate: Halal, HACCP

Action

As an immunity stimulant agent

and maintain health

Dosage and administration:

Adult: 1 - 3 table spoon, 1 - 3 x daily Children above 5 years old: 1 to 3

teaspoon, 1-3 x daily

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia Tel. (62 21) 4302762 / 4392229

Fax.: (62 21) 43938420

Website: www.mahkotadewa.com



MADUCIL - HONEY FOR THE CHILDREN (P-IRT No. 109317509003)

Composition

Mel deperatum, Phaleria macrocapa fructus, Centellae asiatica herba, Curcumae xanthorriza rhizoma, Fragaria Fructus flavour

Type: Liquid

Package: Bottle, Box Content: 100 ml

Certificate: POM TR, Halal, HACC

Usage

Maducil is very good for children. It is proven of supporting the children's health if consumed

Regularly

Direction and Administration:

1 - 2 years old children - 1 teaspoon twice a day 2 - 12 years old children - 2 teaspoons twice a day

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia Tel. (62 21) 4302762 / 4392229

Fax.: (62 21) 43938420

Website: www.mahkotadewa.com





MINYAK TELON

Composition : Oleum Cocos. Oleum Cajuputi. Oleum Feoniculi

Action: Telon oil leaves the body feeling warm and comfortable. Calming boating and common cold. Good for baby and childrens

Directions for use: Apply 5 to 10 drops of telon oil to the chest, stomach, back and soles of feet. It can be used anytime, especially after bath and during cold weather

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248

ORANGIN

(POM TR. 032 624 341)

Certificate GMP From BPOM/NADCF and Certificate Halal from MUI.

Composition: Blumea folium, Echinaceae, Zingiberis rhizoma, Menthae arvensitis Herba, Retrofracti fructus, Panacis radix, Royal Jelly, Honey

Package: Dos content 10 Sachet @ 15 ml Marketing: Malaysia, Singapore and Taiwan

Usage: Traditionally used to expel wind with the symptoms such as fever, stomach ache and mild vomiting, to invigorate vital energy.

Dosage and administration: Three times a day

one sachet after meal.

Producer:
PT. Air Mancur,
JI. Raya Solo Sragen Km. 7 Palur - Solo
Telp. +62-271-825024







MINYAK TELON / Oil (Outside use)

Action: Minyak Telon is good for infants. Anti stomach ache and provide warmness to infants.

Dosage & Direction of Use: Put 5-10 drops of Minyak Telon on the chest, stomach, hips and foot surface. Use this oil everyday after bathing and in cold condition.

Producer:

PT. Nyonya Meneer Jl. Raden Patah No. 191 199 Semarang 50128, Indonesia

DEPKES RI No. TR. 821618691



MAHKOTA DEWA EXTRACT CAPSULES

Composition: Phaleria macrocarpa extrak

(extract) 250 mg, Amylum 135 mg

Action: Traditionally being used in tumor

treatment.

Dosage and direction: Prevention: orally taken, one capsule once daily. Teatment: orally taken, one

capsule three times a day Irradiation

Producer:

PT. Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia

POM TR 033 329 721

Sertificate: Halal, POM TR, HACCP,





MADEDEM CAPSULES

Action :Traditionally being used in Diabetes

mellitus treatment.

Dosage and direction : Prevention : orally taken, one capsule once daily. Teatment : orally taken,

one capsule three times a day

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia

POM TR 063 362 541

Sertificate: Halal, POMTR, HACCP, Irradiation



MADECA CAPSULES

Composition: Phaleria macrocarpa Pericarpium. Gynura procumbens Herba. Curcumae zedoaria Rhizoma. Curcumae alba Rhizoma. Curcumae Rhizoma. Cantellae Herba

Action:Traditionally being used in cancer treatment.

Dosage and direction: Prevention: orally taken, one capsule once daily. Teatment: orally taken, one capsule three times a day

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 - Indonesia

POM TR 053 353 681

Sertificate: Halal, POMTR, HACCP, .





MADETENS CAPSULE

Action: Traditionally being used in the treatment of hypertension symptoms.

Dosage and direction: Prevention: orally taken, one capsule once daily. Teatment: orally taken, one

capsule three times a day

Producer:

PT Mahkotadewa Indonesia Jl. Gaharu AA1, Nyiur Melambai II Koja, Jakarta 14230 Indonesia

POM TR 063 361 861

Sertificate: Halal, POMTR, HACCP, Irradiation

NGERES LINU CAPSULES

DEPKES RI. No. TR 881339051



Composition:

Curcuma domestica rhizoma, Zingiberis rhizoma, Curcumae rhizoma, Panduratae rhizoma

Action: Best for man and woman who work hard and shooting pain such as waist painful, can't sit long time, walk weakness, and body painful, insomnia, sick of bath, hand and foot feel cool, weak body, become numb, rheumatic and others.

Dosage and direction: 2 capsules daily, For athlete 2 capsules, four times a week. Type: Powder, Caplets and Capsule

Producer:

PT. Nyonya Meneer.
Jl. Raden Patah No. 191 199
Semarang 50128, Indonesia





NODIAR TABLET

Composition: Each tablet contains: Attapulgite 300 mg. Psidii folium extract 50 mg. Curcuma domestica rhizoma extract 7,5 mg

Action: For non specifics diarrhea

Dosage and Direction: Adult and children of 12 years old and more: 2 tablets each time, maximum 12 tablets during 24 hours. Children (6 -12 years old): 1 tablet each time, maximum 6 tablets during

24 hours

Produsen:

PT. Kimia Farma Tbk.

NO. REG.: FF 031 500 361



PASAK BUWONO

Composition: Eurycomae longlifoliae Radix (pasak bumi/tingkat ali).

Pimpinella alpina Radix (purwoceng). Oroxyl Radix (kayu lanang). Retrofracti . ructus (cabe jawa).

Action: proven empirically helps improve mens blood circulation, maintains libido, wellnes, vitality and health.

Directions for use: For health maintenance, take 1 caplet twice a day. Take 2 caplet, 2 hours before activity (if needed)

Producer:





PRE MENO CARE

Composition: Cimicifuga racemosa Rhimosa. Valerianae Radix. Apii graveolentis Folium. Curcumae zedoaria Rhizoma. Blumae Folium Action: maintains women's health prior menopause. Helps reduce premenopausal symptoms such as heart palpitation, headaches, night sweats, tiredness, emotional changes and other symptoms. Increases body immune system Dosage: 1 caplet daily regularly

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248



POST MENO CARE

Composition : Red Clover. Cimicifuga racemosa Rhizoma. Valerianae Radix. Mori Herba. Carotae Folium. Blumeae Folium.

Action: Helps maintaning women's health post menopause and helps reducing osteoporosis and other post menopausal complaints such as loss of vaginal mucus, hot flushes, night sweats, insomnia and nervousness

Dosage: 1 caplet 2 times a day regularly for menopausal complaints.

For health maintenance take 1 caplet a day regularly

Producer:





(Women's Health and Beauty Care)



Composition: Mimilan Mintuno: Foeniculi Fructus, Alyxiae Cortex, Amomi Fructus, Piperis nigri Fructus. Pare Anom: Kaempferiae Rhizoma, Zingiberis Rhizoma, Centellae Herba, Sintox Cortex. Ratu Ayu: Zingiberis Rhizoma, Merrimae Tuber, Phyllanthi Herba, Kaempferiae Rhizoma. Sari Asih: Curcumae Rhizoma, Retrofracti Fructus, Abri Folium, Blumae Folium

Action: Mimilan Mintuno: Helps reduce excess vaginal mucus and unpleasant odour. Maintain body fitness and freshness. Pare Anom: Maintain body fitness and promote younger looking skin. Ratu Ayu: Maintain skin helth and body freshness. Sari Asih: Maintain stamina and reduce fatique

Directions for use: 1 caplet daily, after meal. **Mimilan Mintuno**: for every Mondays and Thursdays. **Pare Anom**: for every Tuesdays and Fridays **Ratu Ayu**: for every Wednesdays and Saturdays. **Sari Asih**: for every Sundays

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4 Ciracas,
Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291; Fax. 62-21-8711248



RHEUMENEER

Rheumaneer has been clinical test. Its can use for medical treatment.

Action: Treating for joint painful (arthralgia)

Dosage and direction: Therapy: Twice daily @ 2 capsules. Using this capsule minimum three days Treatment: 2 capsules each night. During using this capsule, It is suggested to take a nap enough time

Producer:

PT. Nyonya Meneer Jl. Raden Patah No. 191 199 Semarang 50128 Indonesia







Composition: Parameriae Extractum (Kayu Rapet Extract), Guazumae Extractum (Daun Jati Belanda Extract), Foeniculi Extractum (Adas Extract), Curcumae Extractum.

Action: Help to reduce excessive fat and reshape your body. Good for man, woman and teenager.

Direction of Use: Put teabag into a full cup of boiled water. Consume 2 or 3 times a day after meal.



Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4 Ciracas,
Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291 : Fax. 62-21-8711248



SUSUT PERUT Tablet

Composition: Guazuma Ulmifolia Lamk. Folium, Curcumae Heyneana Rhizoma, Parameria Laevigata (Juss.) Moldenke Cortex, Zingeber Purpureum Roxb. Rhizoma, Manihot Utillissima (POHL) Leaf Extract, Oryza Sativa Fructus, Aerosil, Sorbic Acid.

Action : Reduce fat. flatten and firming stomach. Good for man and woman

Dosage: 1 tablet in the morning and 1 tablet in the evening daily. For prevention and maintenance of shape, consume 1 tablet every evening daily.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248

TR 952576631. MAL 05061601



B. TRADITIONAL COSMETICS



AYUDARA Cream (Breast massage cream)

Composition: Guazuma Ulmifolia Lamk. Folium, Curcumae Heyneana Rhizoma, Parameria Laevigata. Moldenke Cortex, Zingeber Purpureum Roxb. Rhizoma, Manihot Utillissima. Leaf Extract, Oryza Sativa Fructus, Aerosil, Sorbic Acid.

Action: To smoothing blood circulation around breast, helping to tighten them and forming a beauty shape.

Direction of Use: Clean up your breast using towel and warm water every night before sleeping. Put the cream all over the breast and massage firmly for about 15 minutes. It is encouraged to use Ayudara masker after the massage.

Producer:

PT. Mustika Ratu, Tbk.

JI. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248 CD 1010100964. MAL 05012108 T.

AYUDARA Tablet (Breast Treatment Tablet)



Composition: Pueraria lobata, Sindorae Fructus, Psophocarpi Semen, Curcumae domesticae Rhizoma, and other material to reach (extract form). **Action:** Tighten and refreshing your breast to gain firm, strong and charming form.

Direction of use: Consume 1 tablet three times a day. To get optimal result, it would be better to also using massage cream and Ayudara masker.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248

TR 013512081 MAL 05121315 T





Hair Tonic

Composition: Purified Water, Urang Aring Extract, Tincture Chinae Extract, Mannitol (and) Yeast Extract (and) Glycogen (and) Magnesium Ascorbyl Phospate, Tocopheryl Acetate, Climbazole, Glycerin, Methyl Paraben, PEG 40 Hydrogenated Castor Oil, Perfume, Caramel.

Action: to stimulate hair growth, strengthening hair root, and as hair nutrition. Hair will be strong and lovely.

Direction of Use: Put them with firm and gentle massage continually in hair skin after hair wash every night or morning.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248

CD 0604500114 L MAL 04123424



Hair Oil

Composition: Cocos Nucifera, BHA, Pandanus amaryllis Folium, Nothopanax scutellarius Folium, Cananga Odorata, Rose Centifolia, Jasminum Officinale, Citrus Nobilis.

Action: to shine the true color of your hair and help prevent gray hair. Strengthens the hair as well as roots to prevent broken hair and hair loss

Direction of Use: Apply it on the hair and scalp at night one hour before bed or shampooing as creambath

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia. Telp. 62-21-8711291; Fax. 62-21-8711248

CD 0606390700. MAL 04123423







LULUR KOCOK

Komposisi: Lulur Extract.Butylene Glycol. Scrub. Titanium Dioxide Micronized. Methyl Paraben. Parfume.

Action: cooling the skin, removes dirt and dead skin cells effectively. Makes your skin clean, smooth, bright and fragrant

Direction for use: Shake Before, rub gently all over your body. Then rinse thoroughly. Safe for daily use.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248



Lulur Badan Mas Sinangling

(Traditional body scrub and Soap)

Composition: Amylum Oryzae, Foenigraeci Semen 5%, Canangii Flos 5%, Murrayae Folium 3%, Licorice Extract 2%, Vitamin E Acetate 0.5%, Curcumae heyneanae Rhizoma, Curcumae domesticae Rhizoma, Pandani Folium, Methyl Paraben.

Action: Traditional body scrub makes skin smooth and healthy, fading out dark spots and body odor.

Usage: Use before bath. Mix powder with sufficient water and apply onto arm, neck, body and legs. Wait until partly dry then gently rub off the powder. Use Lulur Badan Mas Sinangling Soap then rinse with water. Use twice a week.

Producer:





Minyak Cendana

(Massage Oil)

Composition: Sandalwood Oil, Palm Kernel Oil, Crude of Sappan Lignum (Caesalpinia sappan L), Tocopheryl Acetate.

Action: to smoothen and leaves natural fragrance to your body. Contains an anti-oxidant to keep the skin smooth and healthy.

Usage: Apply to your hand, legs and body properly, also can be used as massage oil before body scrubing.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248



Shampoo BAYAM (SPINACH SHAMPOO)

Composition: Purified Water, Amaranthus hybridus Extract 5%, Trichogen Liposomes 5%, Sodium Lauryl Ether Sulfate, Cocamidopropyl Betaine, Coconut Fatty Acid Diethanolamide, PEG-7 Glyceryl Cocoate, Sodium Chloride, Methyl Paraben, Perfume, CI 42090, CI 19140.

Action : to maintain healthy and strong hair, prevent hair loss.

Direction of Use: To get best performance, use Cem-Ceman hair oil on hair skin before hair wash and Ramuan Penyubur Rambut after hair wash.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248

Cd0601500376 MAL04123415 T



C. SPA PRODUCT



WHITENING

DEWI SRI SPA MARTHA TILAAR WHITENING BODY SCRUB

Action: to help removing dead cells as well as cleaning skin surface, to get clean, fresh and bright skin.

Dosage and Direction of Use: Wipe the scrubs in a wet skin and brush gently. Wash with warm water then dry it.

Producer:

PT. Martina Berto, Jakarta Indonesia

POM CD. 1003990031



DEWI SRI SPA MARTHA TILAAR BODY CONTOUR MASSAGE OIL

Action: for aging process skin and protect its cells as well as to keep its tightness. This formula is uses for massaging.

Dosage & Direction of Use: Massage using this oil to all over your body.

Producer:

PT. Martina Berto, Bogor Indonesia

POM CD. 1007990046







BALINESE "BOREH" BODY MASK

(Royal Balinese formula)

Action: Boreh is a external Balinese herbal medicine has already handed down for centuries, and it is believe Boreh may cure illness from arthritis, rheumatisms, and cold.

Direction of use: Mix the 30 gram "Boreh" Powder with 50 ml primrose water, till a thick mixture has been produced. Apply to the whole body Lift the Boreh for 20 minutes and rinse well with warm water.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248



BALINESE "MURUT" BODY SCRUB

(Royal Balinese formula)

Action: Murut is a traditional Balinese body scrub and exfoliating. As a natural exfoliating property, Murut is not only to clean the skin from bacteria however it has natural stimulant, heating and emollient properties, so it will speed up the process of exfoliating and make the skins naturally moisture after all.

Direction of use: Mix 30 grams "Murut" powder with primrose water, till a thick mixture has been produced. Scrub the body using a couple time circular palm friction movement and stroking motion, this will help to clean the dead skin cells together with the "murut" formula.

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4
Ciracas, Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291; Fax. 62-21-8711248





EMPON EMPON PEMBERSIH

Empon Empon Intimacy Washing



Action: Empon Empon Intimacy Washing helps kill germs in vagina and makes husband and wife relationship more intimate. It is effective for helping reduce escessive while discharge and wound.

Direction to use: Use ½ liter of water to boil the 200 gr Empon Empon Intimacy Washing. This can be used only 100 gr for every single treatment. Boil this Herbal concogtion for 10 minutes to produce a particular yellowish brown herbal liquid cleanser. This herbal liquid cleanser will be more comfortable in 37-38 °C, to be applied in your intimacy care after having intercourse, giving birth or urinating.

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291 : Fax. 62-21-8711248



RATUS DEDES

Action: Ratus is a concoction from different spices which has an exotic fragrance like in Javanese Keraton. It used for Aromatherapy, air fragrant, room fragrant, hair fragrant, batik fragrant, and body fragrant.

Direction to use: Crush the Ratus ball and put the powder onto the carcoal fire, until you get the smoke and scent. Then spread the smoke all over your hair or clothes. The aroma could last about 2 days. Use it at least once a week.

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4
Ciracas, Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291; Fax. 62-21-8711248







HAND & FOOT SPRAY

Action: The spray that is specially formulated with Lemon, Lemongrass and Basil. Enriched with vitamin A, C, E & F this spray will sooth you hands and feet. Reduce firgal and bacterial groth. Leaving your hands and feet fresh and clean all day. Use daily or whenever needed.

Direction of use: Spray liberraly to feet and hands whenever necessary.

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4
Ciracas, Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291; Fax. 62-21-8711248



LOTION FOR LEG

Action: This moisturizing Lotion For Leg is especially enriched with vitamin A, C & E Liposome and essential oils which will soften and stimulate blood circulation on feet.

Direction of use: After bath and after using Foot Scrub Gel, apply Lotion For Leg evenly. Use as often as needed.

Producer:

PT. Mustika Ratu, Tbk.
Jl. Raya Bogor Km. 26,4
Ciracas, Jakarta Timur 13740 - Indonesia
Telp. 62-21-8711291; Fax. 62-21-8711248





ESSENTIAL OILS

Action: JASMINE EOC (Essential Oil Concentrate): Its active Jasmine essential oil can give calming effect. YLANG YLANG EOC: This essential oil is made from Kenanga Flower extract which is excellent for reducing stress. SANDALWOOD EOC: This pleasant and sweet smell fragrant oil contains the extract of Sandalwood and usually used im religious ritual. The smell of this essential oil is good for calming effect. CLOVE EOC: The fragrant smell of Clove essential oil give energizing effect. CHAMPACA EOC: This essential oil of Champaca can give relaxing effect, adds emmolient and astringet your skin. GINGER EOC: The smell of Ginger is good as an aphrodisiac, gives warmth to the body especially on abdominal area. To help reduce tiredness and give relaxation. CINNAMON EOC: Its strong aroma give stimulating, toning and as an aphrodisiac.

Direction to use: Mix 20 drops of essential oil into massage cream/ carrier oil for body massage, or 30 drops into water filled bath-tub, or 5 drops into bowl for oil burner

Producer:

PT. Mustika Ratu, Tbk. Jl. Raya Bogor Km. 26,4 Ciracas, Jakarta Timur 13740 - Indonesia Telp. 62-21-8711291; Fax. 62-21-8711248



DEWI SRI SPA MARTHA TILAAR INNOSHAPE STRETCHMARK LESSENING CREAM

Action: Maintaining skin tightness and softness, moisturizing and reducing stretch mark (white stripes caused by skin culture stretching formed in pregnancy period). Anti stretch mark agent is effective to gradually reform skin texture. Atsiri oil aroma as stress relieves herbal is effective to give relaxation.

Dosage & Direction of Use: Wipe and massage gently with rectangular moves to all over stomach surface where white stripes appear. Let them absorbed and no need to clean after using. Use this cream twice a day continually every morning after bathing and night before sleeping. For grown up people, use it in the pregnancy and post pregnancy period.

Producer:

PT. Martina Berto, Jakarta Indonesia POM CD. 1010600228





Aromatic Bar Soap

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.

Usage:

A transparent Bar soap to cleanse the body from dirt excess oil and impurities. Makes the skin clean, soft and fresh. Alleviates fatigue and invigorates both body and mind.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Body Wash

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.

Usage:

A Gentle liquid soap to clean the skin from dirt and excess oil. Makes the skin clean, soft and fresh Alleviates fatigue and invigorates both body and mind.

Producer:





Body Scrub

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.

Usage:

A gentle scrub helps to exfoliate dead skin cells and stimulate a new cells growth

Alleviates fatigue and invigorates both body and mind.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Massage Oil

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.

Usage:

A ready to use massage oil to invigorates body and mind, overcome physical fatigue and helps to smooth blood circulation Alleviates fatigue and invigorates both body and mind.

Producer:





Body Lotion

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.

Usage:

Keeps the skin smooth, soft and supple while balancing its natural moisture. Alleviates fatigue and invigorates both body and mind.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.

Bath Salt

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.



Usage:

A Crystal bath salt, which keeps skin smoothness and helps to remove toxic from the skin. Helps to relieve fatigue, gives peaceful feeling while reinvigorate body and mind. Alleviates fatigue and invigorates both body and mind.

Producer:





Herbal Bath

Composition:

Rice extract, Lemon, Chamomile, Cubeb, Camphor and Peppermint oils, balancing between oily and dry skin's condition.

Usage:

Bath herbs or bathing, to provide refreshing and energizing effect while gives aroma to the body Alleviates fatigue and invigorates both body and mind.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.





Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

A transparent Bar soap to cleanse the body from dirt excess oil and impurities. Makes the skin clean, soft and fresh

Lightens dull complexion of the skin while restores its natural glow.

Producer:





PROLINU NEW

POM TR. 062 665 341

Certificate GMP From BPOM/NADCF and Certificate Halal from MUI.

Composition:

Coriandri fructus, Retrofracti fructus, Languatis rhizoma, Cumini fructus, Zingiberis rhizoma, Zingiberis aromaticae rhizoma, Mentahae folium

Package: Dos content 10 Sachet @ 15 ml

Usage: Traditionally used for relieve of joints and muscular pain, waist ache, for general health maintenance to make body warm.

Direction and administration:

Three times a day one sachet.

Producer:

PT. Air Mancur Jl. Raya Solo Sragen Km. 7 Palur - Solo Telp. +62-271-825024

PROURAT (POM TR 052 547 411)

Certificate GMP From BPOM/NADCF and Certificate Halal.

Composition:

Plantago major Folium, Syzigium polyanthum Folium, Cyperus rotundus Rhizoma, Piper nigrum Fructus, Bupleurum falcatum Root

Package: Catch cover @ 4 Tablet

Usage:

Traditionally used for relieve of fatigue, joints pain, muscular pain and stiffness.

Dosage and administration:

Take regularly 2 tablets three times a day.

Producer:

PT. Air Mancur Jl. Raya Solo Sragen Km. 7 Palur - Solo Telp. +62-271-825024







James James

MUSTIKA RAPET

DEPKES RI NO. TR 931367682

Certificate GMP From BPOM/NADCF and Certificate Halal.



Mustika Rapet Capsule was developed from our old product with name "Jamu Mustika Rapet" in the steeped powder forms. "Jamu Mustika Rapet" had been proven experiment pharmacologically and reality. To fulfill market demands and understand what the consumer needs, PT. Air Mancur develop the

method of production in accordance to the current technology advances and research in order to expand its production, to invent and develop a more effective formula with brand name Mustika Rapet in the form of herbs extract capsule.

Composition: Cola Semen, Gallae, Granati pericarpium, Parameriae cortex

Package: Catch Cover content 1 Strip Aluminum foil @ 4 Capsules.

Usage:

Traditionally used for

- To reduce excessive phleam
- Prevents and cures leucorrhea
- To reduce body odor
- Strengthen and tighten the vagina muscles
- Increase desire and harmony between husband and wife

Dosage and administration:

Maintenance dosage: 2 capsules a day, one capsule in the morning and one capsule in the evening.

Producer:

PT. Air Mancur Jl. Raya Solo Sragen Km. 7 Palur - Solo Telp. +62-271-825024



NEW PADIBU CAPLET

REG. NO.: TR 031 518 601 Package: Blister Of 6 Caplet

Assisting to recover health and body stamina

New padibu is a natural medicine that could assisting the recovery of health and body stamina. Plantago major contains of tannins and alkaloid potassium that could overcome tiredness and increase energy. *Trigonella foenum-graecum* semen contains of alkaloid volatile oil, trigonelen, choline, lechitin, and



neucleoalbumin that has tonic activity and make body stronger. *Talinum paniculatum* contains of tannin, saponin, and alkaloid that has tonic and aphrodisiac activity. Bee pollen could increase health and freshness. Yohimbee is an inhibitor selective presynaptic and also a sympatolitic has vasodilatation affect on corpus cavernosum so it is used as aprodisiaca. *Tribulus terrestris* contain mainly steroidal saponin of the furostanol type, with pre dominating quantity effect on spermatogenesis and libido sexualis.

Composition:

Each caplet contains:

- Plantago major Extract
- Trigonella foenum-graecum powder
- Talinum paniculatum powder
- Bee Pollen Powder
- Yohimbee Extract
- Tribulus terrestris

Usage:

Assisting to recover health and body stamina

Dosage And Administration:

1-2 film coated caplet in the morning and night

Storage:

Store in cool and dry place, protect from light

Producer:

PT. Kimia Farma Tbk.

Jl. Padjajaran 29 31 Bandung 40171

Telp.: 022 4204043 (Hunting)

022 4206026

Fax: 022-4237079





SARIAYU MARTHA TILAAR Anti Acne Jamu Tablet

DEP.KES. RI No. TR. 912559281

Composition

Rhizoma Curcuma xanthorriza, Folium Plantago major, Herba Centella asiatica, Rhizoma Curcuma domestica, Fructus Woodfordia frueticosa, Lignum Strychnos lucida, Radix Glycyrrhiza glabra, Flos Syzygium aromaticum, Herba Andrographis paniculata, Fructus Foeniculum vulgare

Usage: Anti acne and healthy skin.

Package: One package contains 30 tablets.

Dosage & Direction of Use: Consume 2 tablets at

once twice a day. 1 tablet @ 700 mg.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.

SARIAYU MARTHA TILAAR JAMU KAPLET SERI BADAN (DEP.KES. RINO. TR. 912559321)

Composition per caplet :Folium Guazuma ulmifolia, bark Quercus infectoria (Oak) Gall, fructus Woodfordia frueticosa, folium Orthosiphon aristatus, folium Semen Parkie roxburghii, rhizoma Curcuma xanthorriza, rhizoma Curcuma heyneana, folium Murraya paniculata, rhizoma Curcuma domestica, folium Cassia angustifolia, bark Punica granatum, rhizoma Zingiberis purpurei, flos Syzygium aromaticum.

Sariayu Martha Tilaar Jamu Kaplet Seri Badan is marketed and distributed in local market of Indonesia and exported to several ASEAN countries as well, for instance Malaysia and Brunei Darussalam.

Package: Each box contains of 30 caplets @ 700 mg **Usage**: Traditionally use to restore freshness to the body **Dosage and administration**: 2 caplets at once twice a day



Producer:

SARIAYU MARTHA TILAAR JAMU KAPLET SELANGKING SINGSET

(DEP.KES. RI No. TR. 912559311)

Composition:

Rhizoma Curcuma heyneana, Folium Guazuma ulmifolia, Bark Punica granatum, Bark Quercus infectoria (Oak) Gall, Rhizoma Kaempferia angustifolia, Folium Murraya paniculata, Rhizoma Curcuma xanthorriza, Rhizoma Curcuma domestica, Rhizoma Zingiberis purpurei, Fructus Piper cuceba, Rhizoma Zingiberis zerumbeti, Rhizoma Acorus calamus, Folium Cassia angustifolia, Folium Orthosiphon aristatus, Fructus Woodfordia Frueticosa, Flos Syzygium Armaticum



Sariayu Martha Tilaar Jamu Kaplet Selangking

Singset is marketed and distributed in local market

of Indonesia and exported to several ASEAN countries as well, for instance Malaysia and Brunei Darussalam.

Package: Each box contains of 30 caplets @ 700 mg

Usage: Traditionally use to reduce body weight and also to restore freshness to the body.

Dosage and administration: 2 caplets at once twice a day

Producer:



SARIAYU MARTHA TILAAR KAPLET WULANDARI

(POM TR.042539301)

Ingredients:

Phaseoli Radiati cotyledon extract, Glycine soja cotyledon extract, Curcumae domestica rhizoma extract, Elephantopi folium extract, Curcumae rhizoma extract, Nigellae sativae semen extract, Cubebae fructus extract, Allii sativi bulbus extract, Baeckeae folium extract, Corn starch, lactose, silica, hydroxypropyl methylcellulose, magnesium tearate, talc.

Sariayu Martha Tilaar Kaplet Wulandari is marketed and distributed in local market of Indonesia and exported to Malaysia

Package: Each bottle contains of 26 caplets @ 700mg

Usage : Improve blood circulation around the uterus, helps improve fertility, and freshness the body

Dosage and administration: 2 caplets twice a day for seven consecutive days before menstruation and continued for seven consecutive days after menstruation. Follow the procedure for 3 consecutive months then stop for the following 1-2 months. Repeat the above procedure until symptoms of pregnancy is detected. Cease the use of this caplet in case of pregnancy and immediately consult your gynecologist.

Producer:





Body Wash

Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

A Gentle liquid soap to clean the skin from dirt and excess oil. Makes the skin clean, soft and fresh Lightens dull complexion of the skin while restores its natural glow

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Body Scrub

Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

A gentle scrub helps to exfoliate dead skin cells and stimulate a new cells growth

Lightens dull complexion of the skin while restores its natural glow

Producer:





Massage Oil

Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

A ready to use massage oil to invigorates body and mind, overcome physical fatigue and helps to smooth blood circulations Lightens dull complexion of the skin while restores its natural glow

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Body Lotion

Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

Keeps the skin smooth, soft and supple while balancing its natural moisture. Lightens dull complexion of the skin while restores its natural glow

Producer:







Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

Bath herbs or bathing, to provide refreshing and energizing effect while gives aroma to the body Lightens dull complexion of the skin while restores its natural glow

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.

Bath Mask



Composition:

Rice extract, Lemon, Sandalwoods, and Camphor oils, whitened the skin to make it bright and clear.

Usage:

A Powder mask to smooth and tightness while gives nutrition to the skin

Lightens dull complexion of the skin while restores its natural glow

Producer:





Innoshape Stretch mark Lessening Cream

Composition:

Centella Asiatica, Collagen, Theopyllisilane C, Zingiber zerumbet, D-Panthenol and Patchouli oil

Usage:

to help inhibit the appearance of stretch mark. Regular use leaves the skin soft and firm beautifully

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Innoshape Tummy Firming Cream

Composition:

Centella asiatica, Collagen, Cafeine, Theopyllisilane C, Patchouli Oil

Usage:

Reduce unwanted cellulite, firming and tightening the belly. Regular use leaves the belly looking revitalized and returns the body's natural beauty

Producer:





Innoshape Breast Firming Cream

Composition:

Centella asiatica, Collagen, Horsetail, Theopyllisilane C, *Zingiber zerumbet*, D-panthenol, Patchouli Oil.

Excellent for maintaining soft breast skin and firm. Regular use rejuvenates the natural beauty of the breasts

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Aromatic Bar Soap

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils,

Usage:

A transparent Bar soap to cleanse the body from dirt excess oil and impurities. Makes the skin clean, soft and fresh. Regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.

Producer:





Body Wash

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils,

Usage:

A Gentle liquid soap to clean the skin from dirt and excess oil. Makes the skin clean, soft and fresh Regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171



Body Scrub

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils,

Usage:

A gentle scrub helps to exfoliate dead skin cells and stimulate a new cells growth

Regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.

Producer:





Massage Oil

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils,

Usage:

A ready to use massage oil to invigorates body and mind, overcome physical fatigue and regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.helps to smooth blood circulation

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171



Body Lotion

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils,

Usage:

Keeps the skin smooth, soft and supple while balancing its natural moisture Regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.

Producer:





Herbal Bath

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils,

Usage:

Bath herbs or bathing, to provide refreshing and energizing effect while gives aroma to the body Regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171



Bath Mask

Composition:

Rice extract, Lemon, Lavender, Cananga and Patchouli oils.

Usage:

A Powder mask to smooth and tightness while gives nutrition to the skin

Regenerate, reducing cellulite, while shape up the body. Improves blood circulations, the lymphatic system and promotes skin regeneration. Known to be effective in reducing cellulite.

Producer:





Aromatic Bar Soap

Compotition:

Rose, Sandalwood, Jasmine and Cananga oils, moistened, softened and smoothened the skin.

Usage:

A transparent Bar soap to cleanse the body from dirt excess oil and impurities. Makes the skin clean, soft and fresh Relieves nervous tension and renew the spirit. It is an ancient recipe of love

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Body Wash

Compotition:

Rice extract, Rose, Sandalwood, Jasmine and Cananga oils, moistened, softened and smoothened the skin.

Usage:

A Gentle liquid soap to clean the skin from dirt and excess oil. Makes the skin clean, soft and fresh Relieves nervous tension and renew the spirit. It is an ancient recipe of love and believed to be amorously stimulating.

Producer:





Body Scrub

Compotition:

Rice extract, Rose, Sandalwood, Jasmine and Cananga oils, moistened, softened and smoothened the skin.

Usage:

A gentle scrub helps to exoliae dead skin cells and stimulate a new cells growth. Relieves nervous tension and renew the spirit. It is an ancient recipe of love and believed to be amorously stimulating.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171



Massage Oil

Composition:

Rice extract, Rose, Sandalwood, Jasmine and Cananga oils, moistened, softened and smoothened the skin.

Usage:

A ready to use massage oil to invigorates body and mind, overcome physical fatigue and helps to smooth blood circulations. Relieves nervous tension and renew the spirit. It is an ancient recipe of love and believed to be amorously stimulating.

Producer:





Body Lotion

Composition:

Rice extract, Rose, Sandalwood, Jasmine and Cananga oils, moistened, softened and smoothened the skin.

Usage:

Keeps the skin smooth, soft and supple while balancing its natural moisture

Relieves nervous tension and renew the spirit. It is an ancient recipe of love and believed to be amorously stimulating.

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171



Innoshape Stretch Mark Lessening Cream

Composition:

Contains *Centella asiatica*, Collagen, Theopyllisilane C, *Zingiber zerumbet*, D-Panthenol and patchouli oil

Usage:

To help inhibit the appearance of stretch mark. Regular use leaves the skin soft and firm beautifully

Producer:





Innoshape Tummy Firming Cream

Composition:

Centella asiatica, Collagen, Cafeine, Theopyllisilane C, Patchouli Oil

Usage:

Reduce unwanted cellulite, firming and tightening the belly. Made from. Regular use leaves the belly looking revitalized and returns the body's natural beauty

Producer:

PT. Martina Berto, Jl. Pulokambing II No. 1 Kawasan Industri Pulogadung, Jakarta Timur, Indonesia Telp. (021) 46037171.



Innoshape Breast Firming Cream

Composition:

Centella asiatica, Collagen, Horsetail, Theopyllisilane C, *Zingiber zerumbet*, D-panthenol, Patchouli Oil.

Usage:

Excellent for maintaining soft breast skin and firm. Regular use rejuvenates the natural beauty of the breasts

Producer:



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APPENDIX

SOME MEDICINAL PLANT ARE USUALLY USED IN JAMU AND TRADITIONAL COSMETICS INDUSTRIES IN INDONESIA

No.	Local Name	Scientifics Name	Part of plant is used
1.	Adas	Foeniculum vulgare Mill.	Fruits
2.	Akar wangi	Andropogon zizinoides Urban.	Roots
3.	Alang-alang	Imperata cylindrical (L.) Beauv.	Rhizomes
4.	Alba	Physalis perivanum	Flowers
5.	Alpukat	Persea gratissima Gaertn.	Leafs
6.	Asam gelugur	Tamarindus indica L.	Fruits, leafs
7.	Ashitaba	Angelica keiskoi koidzmi.	Roots
8.	Bawang putih	Allium sativum L.	Tubers
9.	Bayam	Amaranthus hybridus	Leafs
10.	Belimbing wuluh	Averrhoa bilimbi L.	Fruits
11.	Beluntas	Pluchea indica (L.) Less,	Leafs
12.	Bengle	Zingiber purpureum Roxb.	Rhizomes
13.	Beras putih	Oryza sativa Linn.	
14.	Bidara laut	Strychnos ligustrina Bl.	Woods, seeds, flowers
15.	Bidara upas	Merremia mammosa (Lour.) Hallierf	Tubers
16.	Blustru	Luffa cylindrical (L.) Roem.	Leafs
17.	Botor	Psopocarpus tetragonolobus DC.	Seeds
18.	Brotowali	Tinospora tuberculata Beume	Stems
19.	Cabe jawa	Piper retrofractum Vahl.	Fruits
20.	Ceguk/cekuk	Quisqualis indica L.	Seeds
21.	Cendana putih	Santalum sp.	Woods
22.	Cendana wangi	Santalum album L.	Seeds
23.	Cengkih	Syzygium aromatica (L.) O.K.	Flowers, leafs
24.	Daun dewa	Gynura segetum (Leur.) Merr.	Leafs, roots
25.	Daun duduk	Desmodium inquetrum DC.	Leafs
26.	Daun sendok	Plantago major L.	All parts of plant
27.	Daun seribu	Achillea millefolium L.	All parts of plant
28.	Daun ungu	Graptophyllum pictum (L.) Griff.	Leafs
29.	Delima	Punica granatum L.	Fruits flay
30.	Dilem	Pogostemon cabin J.E. Smith.	Leafs
31.	Dringo	Acorus calamus L.	Roots
32.	Gadung	Dioscorea hispida Denntus.	Tubers
33.	Gambir	Uncaria gambir (Hunter) Roxb.	Dried leafs extract
34.	Gempur batu	Borreria hispida Schum.	All parts of plant
35.	Greges otot	Equisetum debile Roxb.	All parts of plant
36.	Jahe	Zingiber officinale Roxb.	Rhizomes
37.	Jambe	Areca catechu L.	Seeds
38.	Jambu biji	Psidium guajava L.	Leafs
39.	Jambu monyet	Anavardium occidentale L.	Leafs



No.	Local Name	Scientifics Name	Part of plant is used
40.	Jangkang	Sterculia foetida L.	Leafs
41.	Jati belanda	Guazuma ulmifolia Lamk.	Leafs
42.	Jenitri	Elaeocarpus ganitrus Roxb.	Fruits
43.	Jeruk purut	Citrus hystrix DC	Leafs, fruits flay
44.	Joho lawe	Terminalia balerica Roxb.	Fruits
45.	Jungrahap	Baekea frutescens L.	Leafs
46.	Kacang hijau	Phaseolus radiatus Linn.	Seeds
47.	Kapulogo	Ammomum cardamomum Auct.	Fruits
48.	Kayu anyang	Elaeocarpus grandiflora Smith.	Fruits
49.	Kayu manis	Cinnamomum burmani Bl.	Barks, fruits
50.	Kayu putih	Melaleuca leucadendron L.f.	Leafs, flowers
51.	Kayu rapet	Parameria laevigata Moldenke.	Barks, leafs
52.	Kayu ules	Helicteres isora L.	Leafs
53.	Kayu wolo	Plermuni acerifolium Willd.	Woods
54.	Kecubung	Datura metel L.	Leafs
55.	Kedawung	Parkia roxburghii G. Don.	Seeds
56.	Kejibeling	Seriocalyx crispus (L.) Bremek.	Leafs
57.	Kelapa	Cocos nucifera	Oil
58.	Kembang pulu	Carthamus tictorius Linn.	Flowers
59.	Kemenyan	Styrax benzoin Dryand.	Hars
60.	Kemloko	Phyllanthus emblica L.	Fruits
61.	Kemukus	Piper cubeba L. f.	Fruits
62.	Kemuning	Murraya paniculata Jack.	Leafs
63.	Kenanga	Cananga odorata	Flower
64.	Kencur	Kaemferia galanga	Rhizomes
65.	Ketapang	Terminalia catappa Linn.	Leafs
66.	Kina	Cinchona ledgeriana Moens.	Burks, flowers
67.	Krangeyan	Litsea cubeba Pers.	Barks
68.	Kola	Chinchona ledgeriana Moens.	Seeds
69.	Kumis kucing	Orthosiphon aristatus (Bl.) Miq.	All parts of plant
70.	Kunci	Boesenbergia pandurata Roxb.	Rhizomes
71.	Kunci pepet	Kaemferia angustifolia Roscoe.	Rhizomes
72.	Kunyit	Curcuma domestica Val.	Rhizomes
73.	Kunyit putih	Curcuma zedoaria (Berg.) Roscoe.	Rhizomes
74.	Lada	Piper nigrum L.	Seeds
75.	Lampes	Ocimum sanctum L.	Leafs
76.	Lempuyang gajah	Zingiberis zerumbeti LG.	Rhizomes
77.	Lempuyang pahit	Zingiberis amaricanus BL.	Rhizomes
78.	Lempuyang wangi	Zingiberis aromaticum Vahl.	Rhizomes
79.	Lengkuas	Languas galangal (L.) Stunz.	Rhizomes
80.	Lidah buaya	Alloe vera	Leafs
81.	Leng-lengan	Leucas lavandulifolia Smith.	All parts of plant
82.	Mahkota dewa	Phaleria macrocarpa (Scheff) Boerl.	Fruits
83.	Makasar	Brusea amarissima Merr.	Seeds



No.	Local Name	Scientifics Name	Part of plant is used
84.	Masoyi	Massoia aromatica L.	Bark
85.	Melati	Jasminum officinale	Flower
86.	Mengkudu/Pace	Morinda citrifolia L.	Fruits
87.	Meniran	Phyllanthus niruri L.	All parts of plant
88.	Mimba	Azadirachta indica A. Juss.	Leafs, barks, seeds
89.	Nagasari	Messua ferrea L.	Flowers
90.	Nangka	Artocarpus integra Merr.	Woods
91.	Orang-aring	Eclipta prostate (L.) Hassk.	All parts of plant
92.	Pacar cina	Aglaia odorata Bl.	Leafs
93.	Pala	Miristica fragrans L.	Fruits flay
94.	Pandan	Pandanus amaryllis	Leafs
95.	Pare	Momordica carhantia L.	Leafs, roots
96.	Pasak bumi	Eurycoma longifolia Jack.	Roots
97.	Patikan cina	Euphorbia thymifolia L.	Leafs
98.	Patikan kebo	Euphorbia hirta L.	Leafs
99.	Patmosari	Rafflesia patma Bl.	Flowers
100.	Pecut kuda	Stachytarpheta jamaicensis (L.) V.	All parts of plant
101.	Pegagan	Centella asiatica Urb.	All parts of plant
102.	Pepaya	Carica papayaL.	Leafs, roots
103.	Pinang	Areca catechu L.	Seeds
104.	Poko	Mentha arvensis L.	Herba
105.	Poncosudo	Jasminum pubescens Willd.	Leafs, flowers
106.	Prasman	Eupatorium triplinerve Vahl.	Leafs
107.	Pucuk	Saussurea lappa Clark.	Roots
108.	Pulai	Alstonia scholaris R.Br.	Barks
109.	Pule pandak	Rauwolfia serpentine Benth.	Roots
110.	Pulasari	Alyxia stellata R. Br.	Roots
111.	Purwoceng	Pimpinella pruatjan Molkenb.	Roots
112.	Randu	Ceiba pentandra Baerth.	Roots
113.	Rasuk angin	Usnea misaminensis	Leafs thallus
114.	Regulo	Abelmochus moschatus Medik.	Seeds
115.	Saga	Abrus precatorius L.	Leafs
116.	Salam	Syzygium polyanthum (Wigh.) W.	Lrafs
117.	Sambang darah	Exoecaria cochinchinensis Lour.	Roots
118.	Sambiloto	Andrographis paniculata (Bl.) Nees.	Leafs
119.	Sangketan	Achiranthes aspera Linn.	Leafs
120.	Saparantu	Sindora sumatrana Miq.	Fruits
121.	Sariawan	Symplocos odoratissima (Bl.) Choisy	Leafs, barks
122.	Sarimanis	Stevia rebaudiana	Leafs
123.	Sawi	Brassica rugosa Prain.	Seeds
124.	Secang	Caesalpinia sappan L.	Woods
125.	Selasih	Ocimum basilicum L.	Herbs, seeds
126.	Seledri	Apium graveolens L.	Herbs
127.	Sembukan	Paederia foetida L.	Leafs



No.	Local Name	Scientifics Name	Part of plant is used
128.	Sembung	Blumea balsamifera (L.) DC.	Leafs
129.	Serai	Andropogon nardus L.	Leafs
130.	Sidowayah	Woodfordia floribunda Salisb.	Flowers
131.	Sintok lekat	Cinnamomum sintok Bl.	Barks
132.	Sintok madu	Cinnamomum zeylanicum Nees.	Barks
133.	Sirih	Piper betle L.	Leafs
134.	Sirsak	Annona muricata	Leafs
135.	Srigading	Nyctanthes arbotris L.	Flowers
136.	Sudamala	Artemisia vulgaris L.	All parts of plant
137.	Sukmodiluwih	Gunnera macrophylla Bl.	Flowers
138.	Suren	Toona sureni (Bl.) Merr.	Barks
139.	Tabat barito	Ficus deltoidea Jack.	Leafs
140.	Tapak dara	Catharanthus roseus (L.) G. Don.	Herbs
141.	Tapak liman	Elephantopus scaber L.	Leafs
142.	Teki	Cyperus rotundus L.	Rhizome
143.	Tempuyung	Sonchus arvensis L.	Leafs
144.	Temu giring	Curcuma heyneana Val. & Zyp.	Rhizomes
145.	Temu hitam	Curcuma aeruginosa Roxb.	Rhizomes
146.	Temu lawak	Curcuma aeruginosa	Rhizomes
147.	Temu mangga	Curcuma mangga Val.	Rhizomes
148.	Teter	Solanum verbascivolium L.	Leafs, plowers
149.	Trawas	Litsea odorifera Val.	Leafs
150.	Trengguli	Cassia fistula L.	Seeds
151.	Turi	Sesbania grandifolia (L.) Pers.	Leafs
152.	Ubi kayu	Manihot utilissima	Tubers, leafs