



## NATURAL HERBAL PRODUCTS

### **Kwao Krua Dang (*Butea superba*)**



#### **Androgen Hormones: Source of Men's Power**

Androgen is the hormone that stimulates or controls the development and maintenance of male characteristics such as increased muscle mass and strength, enlargement of the penis, sperm production and etc.

#### **Male Menopause (Andropause): The Reduction of Male Sex Hormones**

Normally, the Testosterone to Estrogen ratio in adult male is about 50:1 and gradually decreases to around 20:1 although it can decrease by up to 8:1 depending on age.

The effects that mostly occur are depression, loss of energy and concentration, mood swings, loss of muscle tone, loss of libido and potency, erectile dysfunction, hair loss and other symptoms.

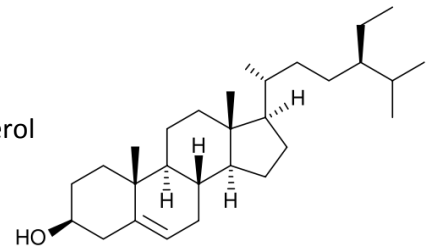
#### **Phyto-androgens: the Hormones from Nature**

*Butea superba* is a native herb of Thailand that has been using as rejuvenation and aphrodisiac herb for over 100 years due to its hormone stimulating mechanism from its chemical constituents that act like androgen hormones. (Androgenic effect)

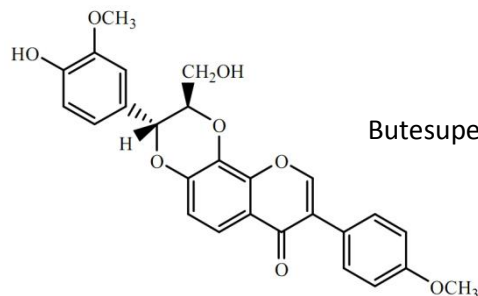
#### **Chemical Constituents from *Butea superba***

The chemical constituents from *Butea superba* consist of flavonoids, flavonoid glycosides and phytosterols such as Butesuperins A and B, beta-sitosterol, campesterol, stigmasterol and others.

Beta-sitosterol



Butesuperin





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## Benefits

- Androgenic effect and anti-estrogenic activity (aphrodisiac effect)
- Improving penile erection
- Increasing sperm quantity, motility and Concentration
- Increasing hair growth
- Immuno-stimulating action

## Applications

For your convenience, we have Butea superba available in many forms to be used for various kinds of products such as dietary supplement, food & beverages and cosmetics.

- Crude Powder
- Extract Liquid
- Extract Powder

## Quality Control

Puerarin, Daidzin, Genistin, Daidzein and Genistein is the Isoflavones which are used for standardization of crude extract by HPLC analysis and also use for control a quality as marker.

## Dosage and Safety

- Maximum dose depends on each country's FDA restrict
- Should not use if under 25 years of age, who are diagnosed with Hypertension, tumors/cancer in Prostate and Benign Prostatic Hyperplasia (BPH)

## Packaging

Standard Package: Plastic vacuum bag  
Plastic gallon container

Packaging can be provided in a variety of container types, depending on customs requirements.

## Recommended Storage

Storage in cool and dry place away from light, excessive heat or freezing temperatures  
Shelf life: 2 years

## Documents

We provide copies of Specification Sheet, MSDS, Plant information and HPLC analysis report





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### Kwao Krua Dang (*Butea superba*) Dry Slice (non-sterile)

Specification Sheet	
<b>General information</b>	
Product name:	Kwao Krua Dang ( <i>Butea superba</i> ) Dry Slice
Part of plant:	Tuber/root
Origin:	Thailand
<b>Physical analysis</b>	
Appearance:	Dry slice
Color:	Brownish
Odor:	Woody
Taste:	Slightly sweet
<b>Active content analysis (Quantitative analysis)</b>	
Active compounds (mg/100g): (specific data based on COA)	Total 5 Isoflavones not less than 30 mg% (Puerarin, Genistin, Daidzin, Genistein, Daidzein)
<b>Heavy metal analysis</b>	
Arsenic:	< 0.5 ppm
Lead:	< 1 ppm
Cadmium:	< 0.5 ppm
Mercury:	< 0.5 ppm
<b>Pesticide residue analysis</b>	
Organochlorine group:	Not detected
Organophosphate group:	Not detected
Pyrethroid group:	Not detected
Carbamate group:	Not detected
<b>Microbiology analysis</b> (maximum allowable data only, specific data based on COA)	
Total aerobic plate count:	<10 <sup>6</sup> cfu/g
Yeast and Mold:	<10 <sup>3</sup> cfu /g
Clostridium pefringens:	<10 cfu /g
Escherichia coli:	<10 MPN/g
Coliforms:	<10 <sup>3</sup> MPN/g
Pseudomonas aeruginosa:	Not detected
Samonella spp.:	Not detected
Strephylococcus aureus:	< 10 cfu/g
Streptococcus spp.:	Not detected

Revision Date: 12/05/2015; 16:00 h.



**AVA Plant**

Plant of Plants

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## NATURAL HERBAL PRODUCTS

### Kwao Krua Dang (*Butea superba*) Powder

Specification Sheet	
<b>General information</b>	
Product name:	Kwao Krua Dang ( <i>Butea superba</i> ) Powder
Part of plant:	Tuber/root
Origin:	Thailand
<b>Physical analysis</b>	
Appearance:	Powder
Color:	Red to brownish
Odor:	Woody
Taste:	Slightly sweet
<b>Active content analysis (Quantitative analysis)</b>	
Active compounds (mg/100g): (specific data based on COA)	Total 5 Isoflavones not less than 30 mg% (Puerarin, Genistin, Daidzin, Genistein, Daidzein)
<b>Heavy metal analysis</b>	
Arsenic:	< 0.5 ppm
Lead:	< 1 ppm
Cadmium:	< 0.5 ppm
Mercury:	< 0.5 ppm
<b>Pesticide residue analysis</b>	
Organochlorine group:	Not detected
Organophosphate group:	Not detected
Pyrethroid group:	Not detected
Carbamate group:	Not detected
<b>Microbiology analysis</b> (maximum allowable data only, specific data based on COA)	
Aerobic plate count:	<10 <sup>4</sup> CFU/g
Yeast and Mold:	<100 CFU/g
Clostridium pefringens:	Not detected
Escherichia coli:	<3 MPN/g
Coliforms:	Not detected
Pseudomonas aeruginosa:	Not detected
Samonella spp.:	Not detected
Strephylococcus aureus:	Not detected
Streptococcus spp.:	Not detected

Revision Date: 12/05/2015; 16:00 h.



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## NATURAL HERBAL PRODUCTS

### Kwao Krua Dang (*Butea superba*) Extract Liquid

Specification Sheet	
<b>General information</b>	
Product name:	Kwao Krua Dang ( <i>Butea superba</i> ) Extract Liquid
Part of plant:	Tuber/root
Origin:	Thailand
Method of extraction:	Liquid Extraction
<b>Physical analysis</b>	
Appearance:	Clear solution
Color:	Red to brownish
Odor:	Woody
Taste:	Bitter
<b>Active content analysis (Quantitative analysis)</b>	
Active compounds (mg/100mL): (specific data based on COA)	Total 5 Isoflavones not less than 50 mg% (Puerarin, Genistin, Daidzin, Genistein, Daidzein)
<b>Heavy metal analysis</b>	
Arsenic:	< 2 ppm
Lead:	<1 ppm
Cadmium:	< 0.5 ppm
Mercury:	< 0.5 ppm
<b>Microbiology analysis</b> (maximum allowable data only, specific data based on COA)	
Total aerobic plate count:	<10 <sup>4</sup> CFU/mL
Yeast and Mold:	< 100 CFU/mL
Clostridium pefringens:	Not detected
Escherichia coli:	< 3 MPN/mL
Coliforms:	Not detected
Pseudomonas aeruginosa:	Not detected
Samonella spp.:	Not detected
Strephylococcus aureus:	Not detected
Streptococcus spp.:	Not detected

Revision Date: 12/05/2015; 16:00 h.



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## NATURAL HERBAL PRODUCTS

### **Kwao Krua Dang (*Butea superba*) Extract Powder**

<b>Specification Sheet</b>	
<b>General information</b>	
Product name:	Kwao Krua Dang ( <i>Butea superba</i> ) Extract Powder
Part of plant:	Tuber/root
Origin:	Thailand
Method of extraction:	Supercritical Fluid Extraction with CO <sub>2</sub>
<b>Physical analysis</b>	
Appearance:	Powder
Color:	Brown
Odor:	Woody
Taste:	Slightly sweet
<b>Active content analysis (Quantitative analysis)</b>	
Active compounds (mg/100g): (specific data based on COA)	Total 5 Isoflavones not less than 200 mg% (Puerarin, Genistin, Daidzin, Genistein, Daidzein)
<b>Heavy metal analysis</b>	
Arsenic:	< 2 ppm
Lead:	<1 ppm
Cadmium:	Not detected
Mercury:	Not detected
<b>Microbiology analysis</b> (maximum allowable data only, specific data based on COA)	
Total aerobic plate count:	<10 <sup>3</sup> CFU/g
Yeast and Mold:	<10 CFU/g
Clostridium pefringens:	Not detected
Escherichia coli:	<3 MPN/g
Coliforms:	Not detected
Pseudomonas aeruginosa:	Not detected
Samonella spp.:	Not detected
Strephylococcus aureus:	Not detected
Streptococcus spp.:	Not detected

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