

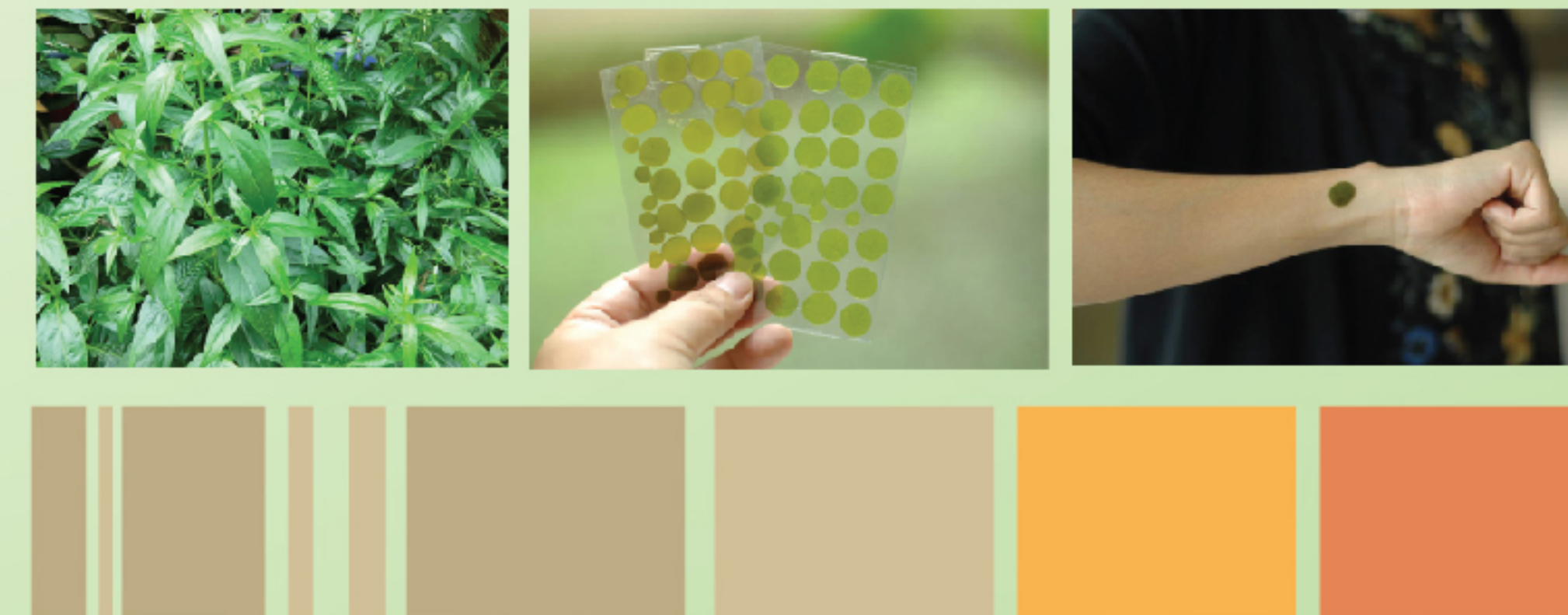
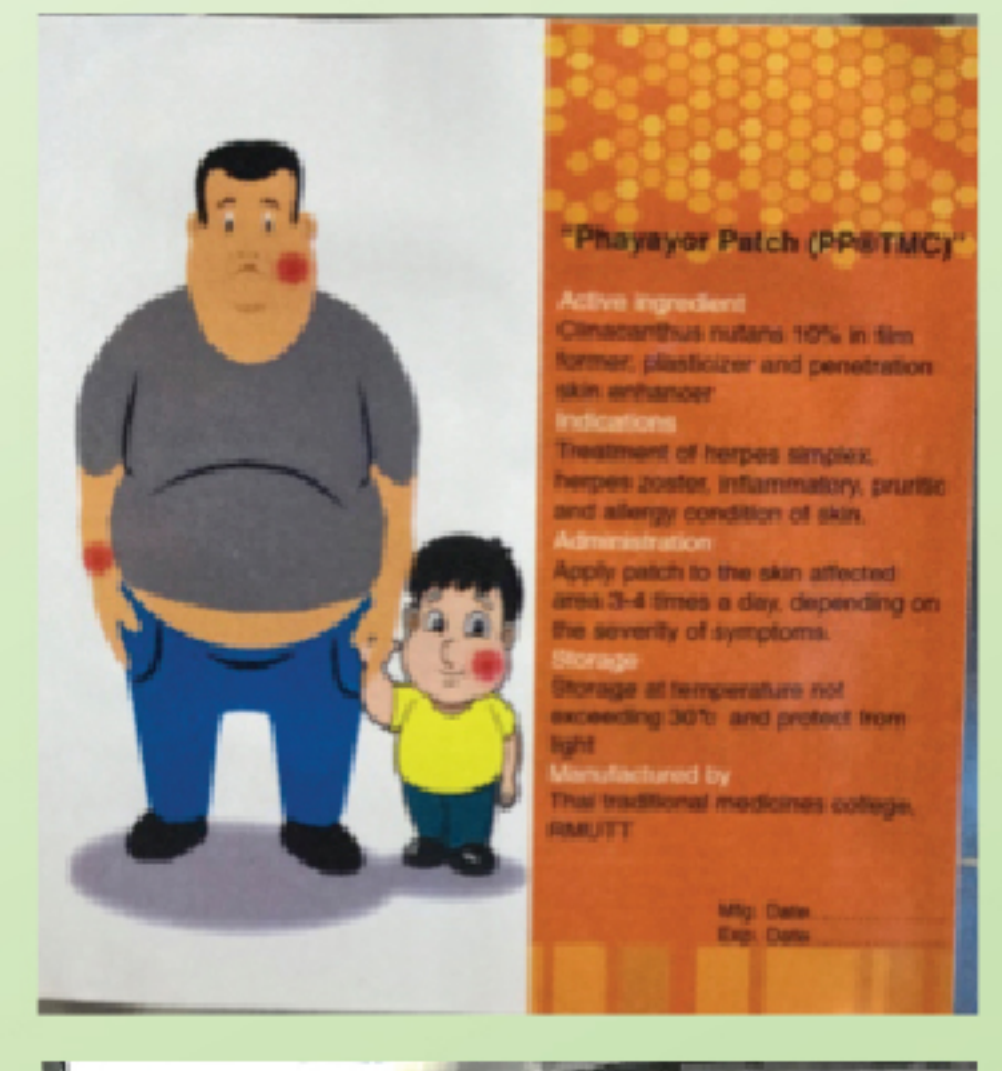
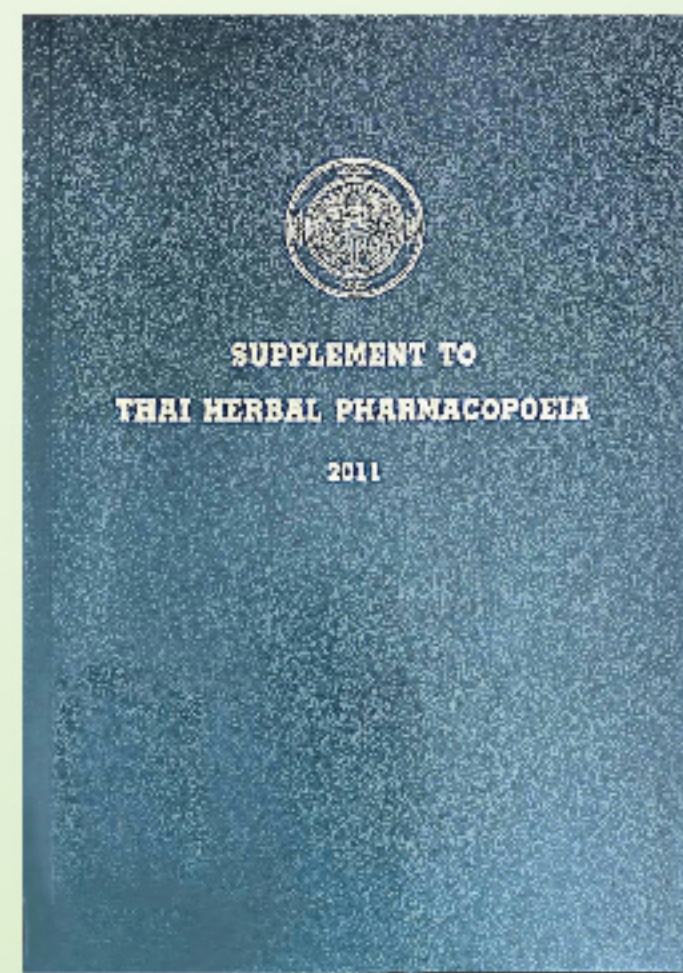


# *Clinacanthus nutans* (C. nutans) -based transdermal patch for symptom of skin disorder



## Product Feature

Viral skin infection and skin rash are the health problem worldwide especially pediatric and older patients. Current products for skin rash are topical steroid when the excessive use increases steroid rebound phenomenon. *C. nutans* is the only one herb that has been included in Thailand National List of Essential Herbal Medicines (NLEM), 2017 the recommended dosages of *C. nutans* in cream and tincture for treatment of skin rash, scorpion, insect bites, *Herpes simplex* and *Varicella zoster* infection by apply 5 times/day at the site of action which are inconvenient to used. While dermal patch dosage forms are reducing the dose frequency and increasing patient compliance.



## Innovation

- Multiple advantages of *C. nutans* patch including...
  - Enhanced clinical efficacy
  - Reduced dose frequency and increased patient compliance
  - Safety and non-allergic
  - Targeted delivery of lupeol and  $\beta$ -sitosterol to the site
  - Prolonged residence time
  - Quick and easy to application
- All ingredients are pharmaceutical and cosmetic grade that are safety and non-allergic to use
- C. nutans* patch has quality control by HPLC quantitative analysis of active ingredients (lupeol and  $\beta$ -sitosterol) in all production lot
- The cost of *C. nutans* patch only \$0.01 USD, it can commercial competition with modern medicines and add economic value to Thai medicinal herb



## IP status

1703000759 Dermal patch formulation from ethanolic extract of *Clinacanthus nutans*

## Application

- Influence of Thai medicinal herb product use to reduce the Thailand import of modern medicine to help the country's economy and side effect from topical steroid use
- Transfer Thai medicinal herb dermal patch technology to Thai people at Study centre of sufficiency economy according to His Majesty's initiative
- On process furthering commercial products with N&K healthcare Co., Ltd.



Before → After patch used for 7 days

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