



## Formulation and quality control of amla (*Phyllanthus emblica*) oil based on Iranian traditional medicine

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**Background and objectives:** Amla (*Phyllanthus emblica*) is native to India and is exported to Iran. Although amla has been mentioned in Iranian traditional medicine (ITM) manuscripts, no pharmaceuticals have been prepared from this medicinal plant in Iran; thus, in the present study amla oil has been designed and formulated according to ITM. **Methods:** *Phyllanthus emblica* and *Myrtus communis* were purchased from herbal market of Tehran and their scientific names were confirmed. Quality control tests were performed on the herbs. For preparing amla oil, the aqueous extract of *Myrtus communis* leaves was prepared by using maceration method for 24 h. Then, the mixture was filtered and amla was added to the extract and shaken for 48 h. After filtering the mixture, sesame oil was added to the filtrate (in equal volume) and heated until all water was evaporated and the oil remained. Quality control examinations including determination of viscosity, density, acid value, saponification value and microbial tests were performed on the oil. **Results:** Amla oil was dark yellow in color with sesame odor. The density was found to be 0.966 mg/mL and the viscosity was 108.2 centipoise. Acid value was 3.03 mg KH/g oil and saponification value was zero. No fungal or bacterial growth was observed. **Conclusion:** The formulated amla oil demonstrated acceptable physicochemical characteristics and could be introduced for further mass production after completing the final required evaluations.

**Keywords:** formulation, Iranian traditional medicine, *Myrtus communis*, *Phyllanthus emblica*, quality control

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