


**Review**

A vibrant rainbow with saffron strands emerging from its right end, set against a blue background with a repeating pattern of small floral motifs.

**A Natural Antidepressant**

# Saffromood

Accepted in comprehensive Kaplan 2009



A randomized, double-blind, clinical trial comparing the efficacy and safety of *Crocus sativus* L. with Fluoxetine for improving mild to moderate depression in post percutaneous coronary intervention patients

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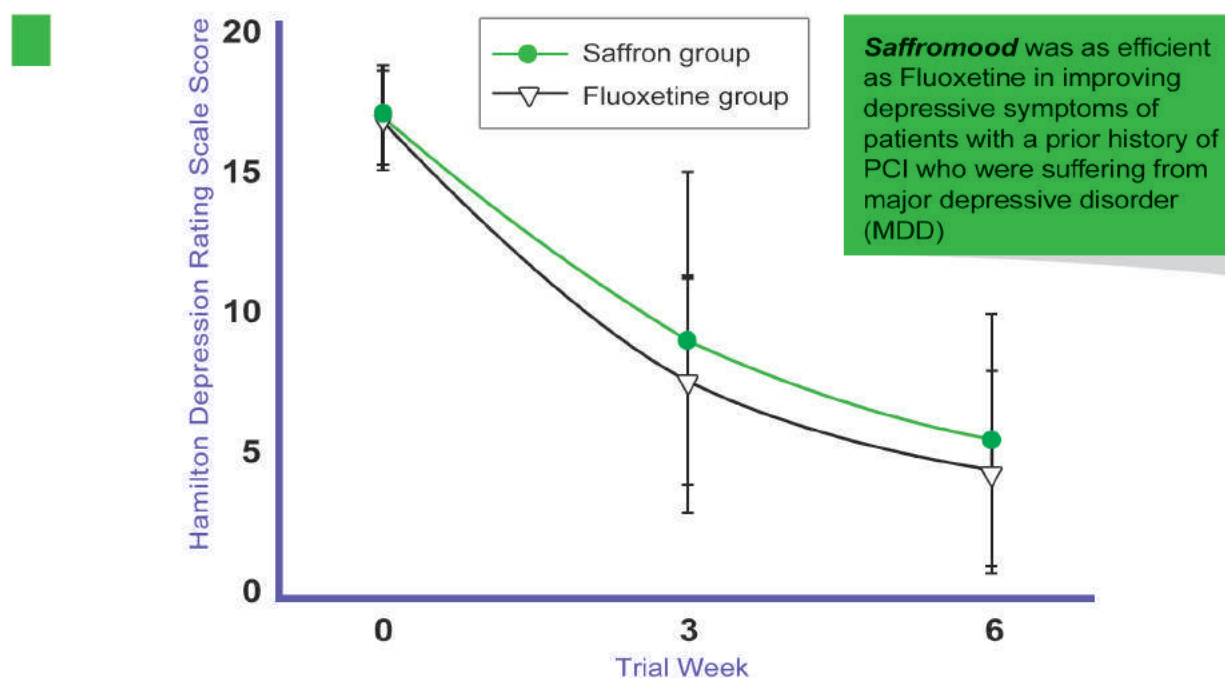
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Abstract

**Objective:** A significant correlation exists between coronary artery diseases and depression. The aim of this trial was to compare the efficacy and safety of Saffron versus Fluoxetine in improving depressive symptoms of patients who were suffering from depression after performing percutaneous coronary intervention (PCI).

**Methods:** In this randomized double-blind parallel-group study, 40 patients with a diagnosis of mild to moderate depression who had undergone PCI in the last six months were randomized to receive either Fluoxetine (40 mg/day) or Saffron (30 mg/day) capsule for six weeks. Participants were evaluated by Hamilton depression rating scale (HDRS) at weeks 3 and 6 and the adverse events were systemically recorded.



**Fig. 1.** Comparison of Hamilton depression rating scale (HDRS) scores [mean (SEM)] over time between the two study groups.

**Results:** By the study endpoint, no significant difference was detected between two groups in reduction of HDRS scores ( $P=0.62$ ). Remission and response rates were not significantly different as well ( $P=1.00$  and  $P=0.67$ ; respectively). There was no significant difference between two groups in the frequency of adverse events during this trial.

**Conclusion:** Short-term therapy with Saffron capsules showed the same antidepressant efficacy compared with Fluoxetine in patients with a prior history of PCI who were suffering from depression.

Comparison of *Crocus sativus* L. and Imipramine in the treatment of mild to moderate depression: A pilot double-blind randomized trial

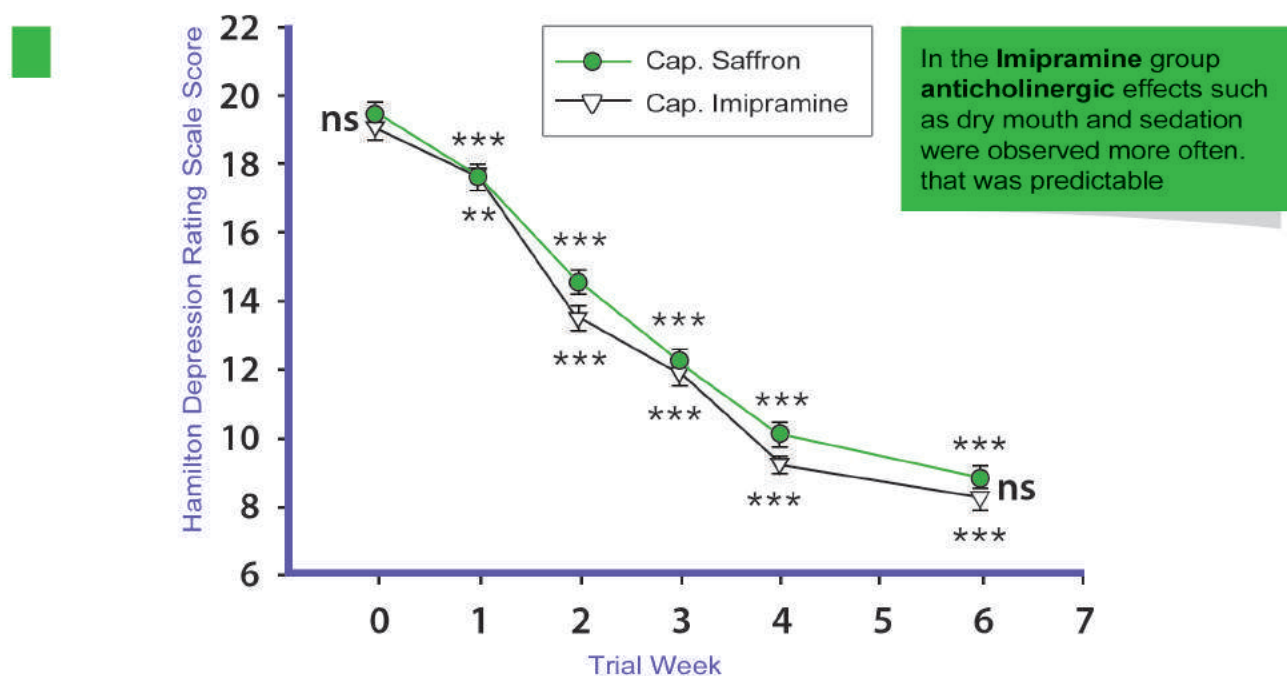
Shahin Akhondzadeh <sup>1</sup>, Hasan Fallah-Pour<sup>1</sup>, Khosro Afkham <sup>1</sup>, Amir Hossein Jamshidi <sup>2</sup> and Farahnaz Khalighi-Cigaroudi <sup>2</sup>

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Abstract

**Objective:** Our objective was to compare the efficacy of stigmas of *Crocus sativus* (**Saffron**) with **Imipramine** in the treatment of mild to moderate depression in a 6-week pilot double-blind randomized trial.

**Methods:** Thirty adult outpatients who met the Diagnostic and Statistical Manual of Mental Disorders, 4th edition for major depression based on the structured clinical interview for DSM IV participated in the trial. Patients have a baseline Hamilton Rating Scale for Depression score of at least 18. In this double-blind, single-center trial, patients were randomly assigned to receive capsule of **Saffron** 30 mg/day (TDS) (Group 1) and capsule of **Imipramine** 100 mg/day (TDS) (Group 2) for a 6-week study.



**Fig. 1.** Mean ± SEM scores of two groups of patients on the Hamilton Depression Rating Scale. ns = non-significant, \*\* = P < 0.01 and \*\*\* = P < 0.001. The horizontal symbols (\*\* and \*\*\*) were used to express statistical significance versus their respective baseline value and ns symbols are for between group comparisons.

**Results:** **Saffron** at this dose was found to be effective similar to **Imipramine** in the treatment of mild to moderate depression (F = 2.91, d.f. = 1, P = 0.09). In the **Imipramine** group anticholinergic effects such as dry mouth and also sedation were observed more often that was predictable.

**Conclusion:** The main overall finding from this study is that **Saffron** may be of therapeutic benefit in the treatment of mild to moderate depression. To the best of our knowledge this is the first clinical trial that supports this indication for **Saffron**.

Hydro-alcoholic extract of *Crocus sativus* L. versus fluoxetine in the treatment of mild to moderate depression: a double-blind, randomized pilot trial

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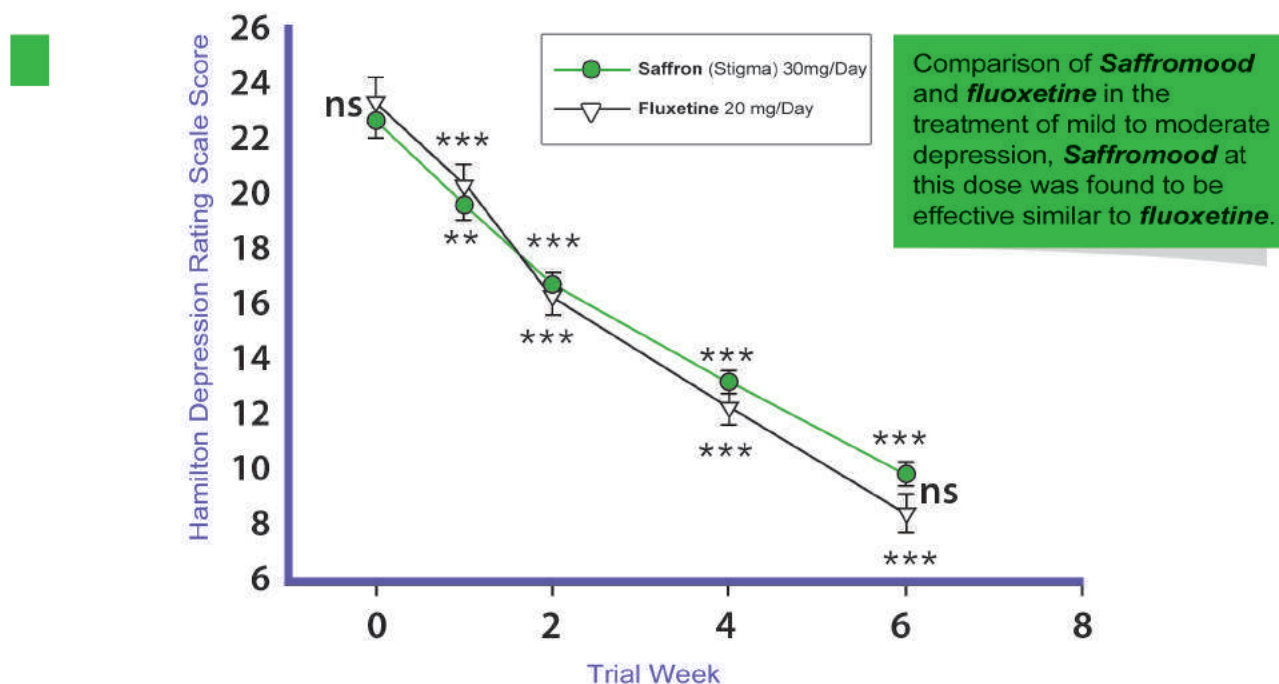
<sup>a</sup> Psychiatric Research Center, Roozbeh Hospital, Tehran University of Medical Sciences, South Kargar Avenue, Tehran 13337, Iran

<sup>b</sup> School of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran

Abstract

**Objective:** Our objective was to compare the efficacy of hydro-alcoholic extract of *Crocus sativus* (stigma) with fluoxetine in the treatment of mild to moderate depression in a 6-week double-blind, randomized trial.

**Methods:** Forty adult outpatients who met the Diagnostic and Statistical Manual of Mental Disorders, fourth edition for major depression based on the structured clinical interview for DSM-IV and with mild to moderate depression participated in the trial. In this double-blind, single-center trial and randomized trial, patients were randomly assigned to receive capsules of *saffron* 30 mg/day (BD) (Group 1) and capsule of fluoxetine 20 mg/day (BD) (Group 2) for a 6-week study.



**Fig. 1.** Mean±S.E.M. scores of two groups of patients on the Hamilton Depression Rating Scale. (ns) Non-significant; (\*\*)  $P < 0.01$  and (\*\*\*)  $P < 0.001$ . The horizontal symbols (\*\* and \*\*\*) were used to express statistical significance vs. their respective baseline value and ns were used for between group comparisons.

**Results:** *Saffron* at this dose was found to be effective similar to fluoxetine in the treatment of mild to moderate depression ( $F = 0.13$ , d.f. = 1,  $P = 0.71$ ). There were no significant differences in the two groups in terms of observed side effects.

**Conclusion:** The results of this study indicate the efficacy of *Crocus sativus* in the treatment of mild to moderate depression. A large-scale trial is justified.

Comparison of petal of *Crocus sativus* L. and fluoxetine in the treatment of depressed outpatients: A pilot double-blind randomized trial.

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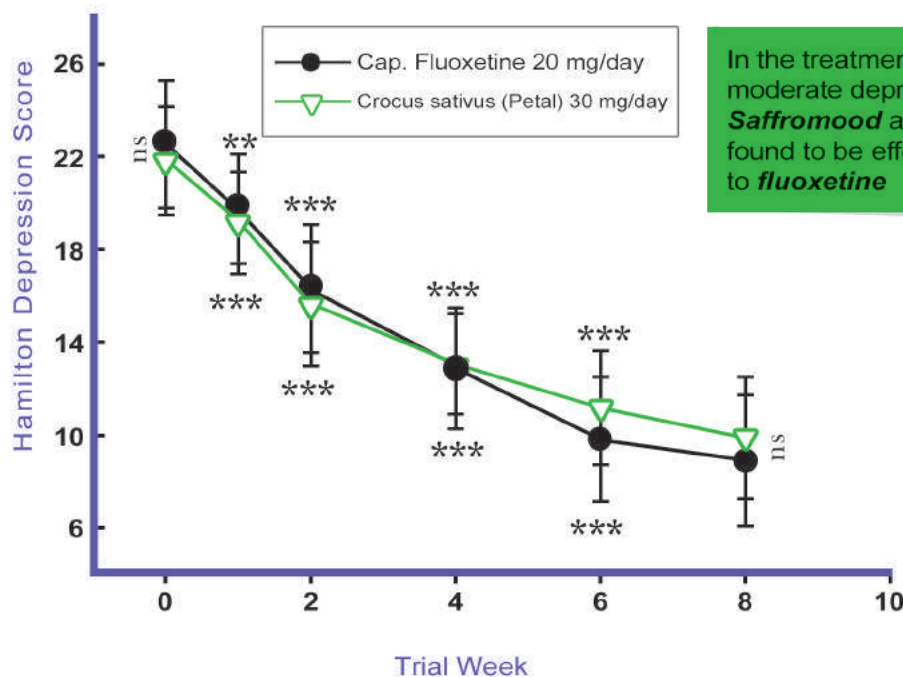
<sup>d</sup> Deputy for Drug and Food, Ministry of Health and Medical Education, Iran

<sup>e</sup> Research Unit, Tehran Heart Center, Tehran University of Medical Sciences, Tehran, Iran

Abstract

**Objective:** Our objective was to compare the efficacy of petal of *C. sativus* with fluoxetine in the treatment of depressed outpatients in an 8-week pilot double-blind randomized trial.

**Methods:** Forty adult outpatients who met the DSM- IV criteria for major depression based on the structured clinical interview for DSM- IV participated in the trial. Patients have a baseline Hamilton Rating Scale for Depression score of at least 18. In this double-blind and randomized trial, patients were randomly assigned to receive capsule of petal of *C. sativus* 15 mg bid (morning and evening) (Group 1) and fluoxetine 10 mg bid (morning and evening) (Group 2) for a 8-week study.



**Fig. 1.** Mean±S.E.M. scores of two groups of patients on the Hamilton Depression Rating Scale. ns = non-significant, \*\*=P< 0.01 and \*\*\*=P< 0.001. The horizontal symbols (\*\* and \*\*\*) were used to express statistical significance versus their respective baseline value and vertical symbols (ns) were used for between group comparisons.

**Results:** At the end of trial, petal of *C. sativus* was found to be effective similar to fluoxetine in the treatment of mild to moderate depression (F=0.03, d.f.=1, P=0.84). In addition, in the both treatments, the remission rate was 25%. There were no significant differences in the two groups in terms of observed side effects.

**Conclusion:** The present study is supportive of other studies which show antidepressant effect of *C. sativus*.

**Crocus sativus L. in the Treatment of Mild to Moderate Depression : A Double-blind, Randomized and Placebo-controlled Trial**

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Homayoun Amini <sup>1</sup>, Hassan Fallah-Pour <sup>1</sup>, Amir-Hossein Jamshidi <sup>2</sup> and Mousa Khani <sup>2</sup>

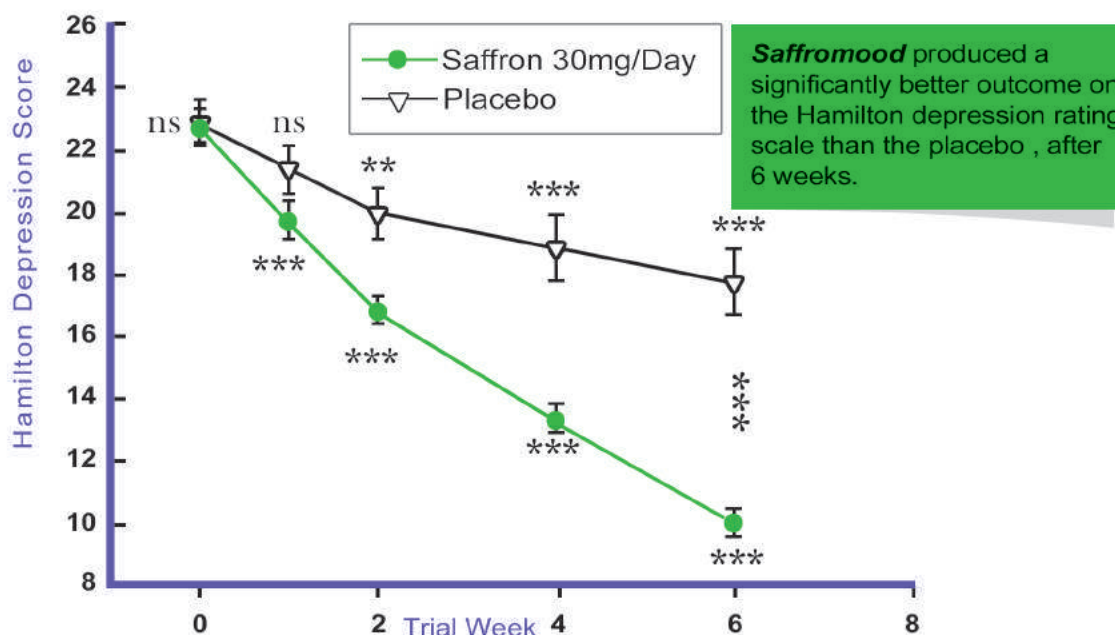
1 Psychiatric Research Center, Roozbeh Hospital, Tehran University of Medical Sciences, Tehran 13337, Iran

2 Institute of Medicinal Plants, Tehran, Iran

**Abstract**

**Objective:** Our objective was to assess the efficacy of the stigmas of *Crocus sativus* (**saffron**) in the treatment of mild to moderate depression in a 6-week double-blind, placebo-controlled and randomized trial.

**Methods:** Forty adult outpatients who met the Diagnostic and Statistical Manual of Mental Disorders, 4th edition for major depression based on the structured clinical interview for DSM IV participated in the trial. Patients had a baseline Hamilton rating scale for depression score of at least 18. In this double-blind, placebo controlled, single-centre and randomized trial, patients were randomly assigned to receive a capsule of **Saffron** 30 mg/day (BD) (Group 1) or a capsule of placebo (BD) (Group 2) for a 6-week study.



**Fig. 1.** Mean±SEM scores of two groups of patients on the Hamilton depression rating scale. ns, non-significant, \*\*, p<0.01 and \*\*\*, p<0.001. The horizontal symbols (\*\* and \*\*\*) were used to express statistical significance versus their respective baseline value and vertical symbols and ns were used for between group comparisons.

**Results:** At 6 weeks, *Crocus sativus* produced a significantly better outcome on the Hamilton depression rating scale than the placebo (d.f. = 1, F = 18.89, p < 0.001). There were no significant differences in the two groups in terms of the observed side effects.

**Conclusion:** The main overall finding from this study is that petal of *C. sativus* may be of therapeutic benefit in the treatment of mild to moderate depression.

**Crocus sativus L. (petal) in the treatment of mild-to-moderate depression: A double-blind, randomized and placebo-controlled trial**

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Amir Hossein Jamshidi <sup>d</sup>, Seyed Hesameddin Abbasi <sup>e</sup>, Shahin Akhondzadeh <sup>c</sup>,

<sup>a</sup> Department of Anesthesiology, Arak University of Medical Sciences, Arak, Iran

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<sup>c</sup> Psychiatric Research Center, Roozbeh Hospital, Tehran University of Medical Sciences, South Kargar Street, Tehran 13337, Iran

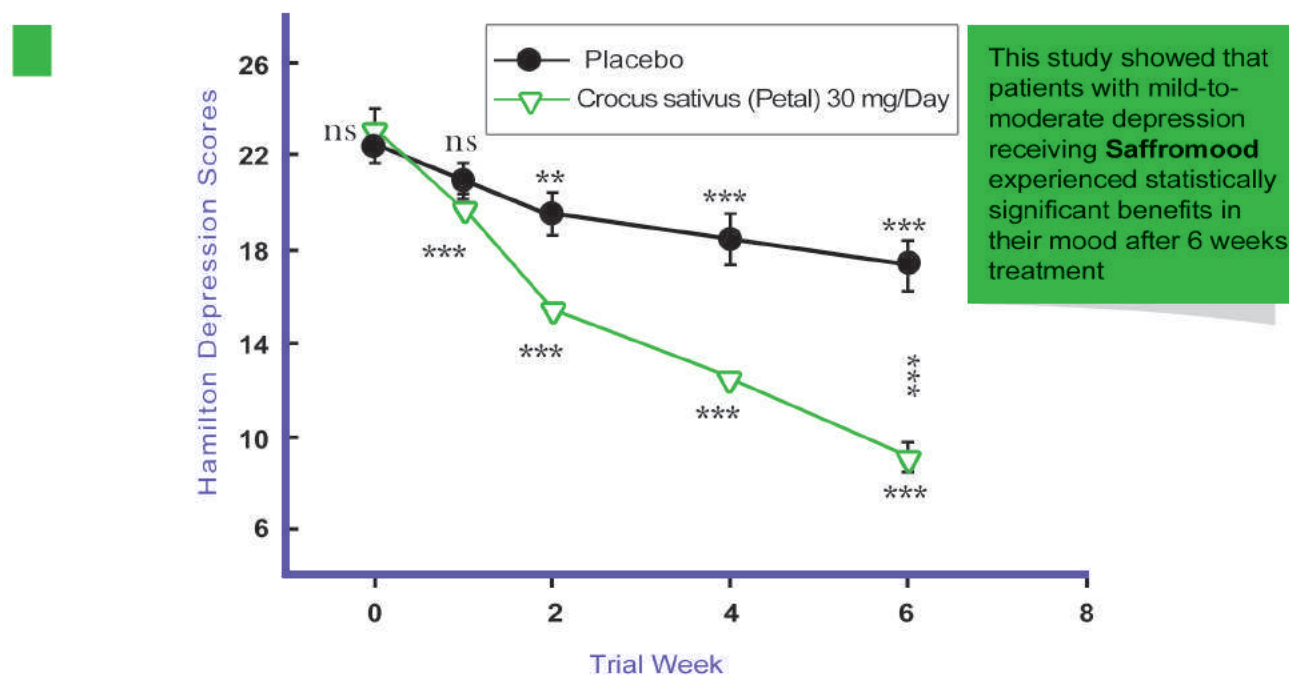
<sup>d</sup> Deputy for Drug and Food, Ministry of Health and Medical Education, Iran

<sup>e</sup> Research Unit, Tehran Heart Center, Tehran University of Medical Sciences, Tehran, Iran

**Abstract**

**Objective:** Our objective was to assess the efficacy of petal of *Crocus sativus* in the treatment of mild-to-moderate depression in a 6-week double-blind, placebo-controlled and randomized trial.

**Methods:** Forty adult outpatients who met the Diagnostic and Statistical Manual of Mental Disorders, fourth edition for major depression based on the structured clinical interview for DSM IV participated in the trial. In this double-blind, placebo-controlled and randomized trial, patients were randomly assigned to receive capsule of petal of *C. sativus* 30 mg/day (BD) (Group 1) and capsule of placebo (BD) (Group 2) for a 6-week study.



**Fig. 1.** Mean ± SEM scores of two groups of patients on the Hamilton depression rating scale. ns, non-significant, \*\* p < 0.01 and \*\*\* p < 0.001. The horizontal symbols (\*\* and \*\*\*) were used to express statistical significance versus their respective baseline value and vertical symbols and ns were used for between group comparisons.

**Results:** At 6 weeks, petal of *C. sativus* produced a significantly better outcome on Hamilton Depression Rating Scale than placebo (d.f. = 1, F = 16.87, p < 0.001). There were no significant differences in the two groups in terms of observed side effects.

**Conclusion:** This study showed that patients with mild-to-moderate depression receiving petal of *C. sativus* experienced statistically significant benefits in their mood after 6 weeks treatment.



## **Saffromood :**

- As effective as **Imipramine** in mild to moderate depression
- As effective as **Fluoxetine & SSRIs** in mild to moderate depression
- Has no **Anti cholinergic** side effects
- Has no **Sexual dysfunction** side effects
- Suitable for such patients which are often **reluctant** to take **synthetic antidepressants**
- Accepted in **Alternative medicine** chapter in **Comprehensive Kaplan** 2009

### **Dosage :**

30 mg/day

### **Indication : Mild to moderate Depression**

#### **Not recommended in:**

Bipolar depression, pregnancy & lactation.



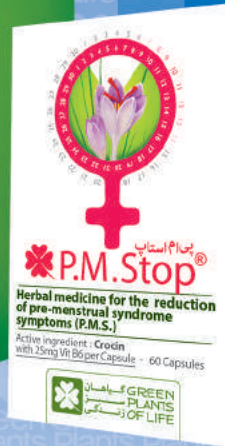
Mild to moderate Depression

Pre Menstrual Syndrome ( PMS )

SSRI induced Sexual Dysfunction in female

SSRI induced Sexual Dysfunction in male

Mild to moderate & Moderate to severe Alzheimer



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