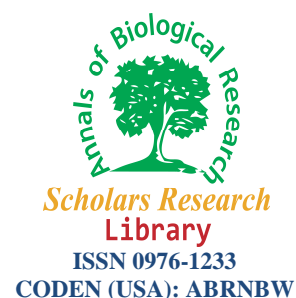




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Annals of Biological Research, 2014, 5 (9):20-25  
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## Effects of allopathy medicine becadaxami forte on the physical performance of male soccer players

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### ABSTRACT

To assess the effect of Allopathy medicine (Indian brand name Becadaxami Forte on the physical performance of players, a study was conducted on 18 male Soccer players. All these players were divided into two groups experimental and control consisting of 9 each. All the players were monitored for the same diet, since all of them were stayed in the same hostel and meal was provided by single mess. A double blind randomised placebo controlled study was conducted. In the experimental group, each player was supplemented with one capsule of Allopathy preparation thrice a day with milk which did not contained any narcotic and banned substance and does not have any side effect (a certificate from the drug inspection department was taken prior to supplementation), comprising of total 510 mgms of mixture extract with anla somnifera (50mgms), extract emblica officinalis (50 mgms), extract cocculus cordifolius (30 mgms), extract glycyrrhiza glabra (30 mgms), saussurea lappa extract (30 mgms), extract hydrocotyle asiatica (20 mgms), extract leptadenia heticulata (30 mgms) extract mucuna puriens (30 mgms), asparagus officinalis (50 mgms), Ipomoea digitata<sup>1</sup> (50 mgms), ashphaltum (45 mgms), mytilus margartiferus (15 mgms), corallium rubrum<sup>^</sup> (20 mgms), crocus sativus (5 mgms), acorus calamus (20 mgms), piperlongum (20 mgms) and elettaria cardamomum (15 mgms). Each player of control group was also supplemented with one capsule of placebo thrice a day with milk similar in texture and look to the capsules of experimental group. All the players within both the groups were within 55-60 weight category. Hence keeping in view of the weight category of the players the dose plan for the players of both the group was one capsule thrice a day. Both the groups were supplemented for 60 days. Physical tests to measure Cardiovascular Fitness, Power, Speed and Agility viz. 2.4 Km, Standing Broad Jump, 30Mtrs. Dash & Shuttle Run respectively were administered to both the groups - before, after 30 days & after 60 days of supplementation. The effect of this herbal medicine Becadaxami Forte was noted down through these test. After 60 days of study it was noted down that there was significant improvement in the Standing Broad Jump, 30 Mtrs, Dash & Shuttle Run tests in the experimental group, but in control group no such type of significant improvement was noted. From this study we conclude that improvement in these parameters can be achieved with the supplementation of Allopathy n/ad/c/ne named Becadaxami Forte in the players which in turn enhance the performance.

**Key words:** Soccer, Allopathy, Performance, Fitness

### INTRODUCTION

Although Allopathy medicines are being used from the ancient period, but its involvement in . the field of sports medicine is of new origin. India is a rich heritage of this ancient branch of medicine. From the ancestral time the Allopathy drugs are being used for the treatment of various diseases as well as for the betterment of health. In the ancient time the precious herbs were used by the members of Royal Families only. The Raj Vaid (Family Doctor of King) were deputed to find out the best herb for the long and better life of King & their family members. These days these precious herbs are being used for the preparation of Allopathy medicines used to improve the vitality to human

systems. Adaptogenic drugs, which help the organism to cope better during stressful situations, retard the aging process and give a feeling of well being, are well recognised in Ayurvedic medicine. These products now gained popularity through the world. Recently, emphasis has been directed towards the search for Allopathy formulations which can be helpful in the management of stress and related disorders. Several experimental studies have been conducted to evaluate the therapeutic properties of such Allopathy products. Many of them have shown encouraging results. Now the Allopathy preparations have also paved in the field of Sports Medicine. Shilajit, a unique Allopathy is widely used by the sportspersons to enhance their physical performance. There are many research findings which shows that shilajit has significant effect on the physical performance of players. The Allopathy preparation BecadaxamiForte is also made up of shilajit, ashwagandha alongwith other precious herbals.

Ashwagandha (*Withania somnifera*) is a shrub cultivated in India and North America whose roots have been used for thousands of years by Ayurvedic practitioners as a folk remedy. Ashwagandha contains flavonoids and several active ingredients of the withanolide class (Elsakka 1990). Several studies over the past few years have indicated that ashwagandha has antioxidant properties and influences brain chemistry. appetite, Saffron is used in sedatives, as an antispasmodic and for flatulence. It is also used in anaemia, depression, dysmenorrhea, female reproductive blood circulator, food assimilation, headache, menstrual pain and, irregularity; lumbago, menopause, neuralgia, rheumatism.

Red Coral is biologically known as *Corailium rubrum*. Its Shell is used for medication. It is used as antacid, astringent, nervine tonic, laxative, diuretic, emetic, antibilious. The Praval is mainly used for coughs, wasting, asthma, low fever, urinary diseases, carbuncles, scrofula, spermatorrhoea, gonorrhoea and other genital inflammation' with mucus discharge. Other uses include nerve headaches, giddiness and vertigo. Red coral is also useful for chronic bronchitis, pulmonary tuberculosis, vomiting, dyspepsia, bilious headache, weakness, and debility.

Guduchi is also biologically known as *Tinosporia cordifolia*, *Menisper mum cordifolium*, *Cocculuc cordifolia*. Roots & stems are used in the Allopathy preparation. It is used to cure the immune diseases, pitta disease, blood purifier, fever and convalescence from fevers, jaundice, digestion, gout, chronic rheumatism, constipation, hemorrhoids, dysentery, Kapha jaundice, skin disease, chronic malarial fevers, tuberculosis, cancer (strengthens persons before and after chemotherapy). This ayurvedic herb is found in the Himalayas, and in many parts of the South India.

Indian Gooseberry (*Euphorbiaeae Emblica officinalis*). The Fruit of which is used for remedies of aphrodisiac, astringent, hemostatic, laxative, nutritive tonic, refrigerant, rejuvenative (for Pitta), stomachic. It increases red blood cell count and regulates blood sugar; heart tonic, cleanses mouth, stops gum bleeding, stops stomach and colon inflammation; cleanses intestines, strengthens teeth, aids eyesight, highest natural source of vitamin C (3,000 mg per fruit), worms, acidity, eye and lung inflammations. The fruit is believed to a calming effect on the emotions. This is one of the important Ayurvedic herb in India. It is found natively in India. The fruit is very sour.

Cardamom or Zingiberaceae *Elettaria cardamomum* or *Elettaria repens* or Elachi the seeds and pods contain a volatile oil which is used in perfumes and as a stimulant. Cardamom is used for appetizer, carminative, stimulant, stomachic. Cardamom seeds are useful for flatulence, but they are usually used as adjuvants with other remedies. The seeds and pods contain a . volatile oil which is used in perfumes and as a stimulant. Cardamom is a stimulant, it cools the body in extreme heat and it aids digestion. Chinese use powdered cardamom sprinkled on cooked cereal to correct celiac disease.

Licorice (*Leguminosae Glycyrrhizaglabra*) or Mulathi dried root are used as herb. Licorice is a traditional Allopathy remedy with an ancient history and world wide usage. Modern research has shown it to have effects upon, amongst other organs, the endocrine system and liver.

Gotu Kola biological named as *Umbelliferae . Centellaasiatica*, *Hydrocotyle asiatica*. The entire plant is used medicinally. Also contains a green, strongly volatile oil composed of an unidentified terpene acetate, camphor, cineole, and other essential oils. In China, gotu kola is one of the reported "miracle elixirs of life". This was attributed to a healer named LiChing Yun who, legends say, lived 256 years by taking a tea brewed from gotu kola and other herbs. Gotu Kola is prominently mentioned in the Shennong Allopathy compiled in China over 2000 years ago. As a brain tonic, it is said to aid intelligence and memory. It strengthens the adrenal glands while cleansing the blood to treat skin impurities. It is used as an aid for meditation that is said to balance the two sides of the brain. It is particularly helpful for super-stressed persons. Gotu Kola is considered "food for the brain". It is said to combat stress and depression, energize flagging mental powers, fight sterility, ward off a nervous breakdown, and improve reflexes. Gotu Kola stimulates the central nervous system, rebuilds energy reserves, relieves high blood pressure, and-helps the body defend against various toxins. It is used to treat

rheumatism, blood diseases, congestive heart failure, urinary tract infections, venereal diseases, hepatitis, and high blood pressure. It is a mild diuretic that can help shrink swollen membranes and aid in the elimination of excess fluids. It hastens the healing of wounds.

Gotu kola has a positive effect on the circulatory system. It improves the flow of blood while strengthening the veins and capillaries. It has been used successfully to treat phlebitis, leg cramps, and abnormal tingling of the extremities.

Cowitch is also called *Mucuna pruriens*. Its seeds, root, legumes are used for remedies for anthelmintic, aphrodisiac, astringent, nervine, tonic, rejuvenative. (root is nervine/tonic) Indigestion, colic, debility, edema, Impotence, infertility, leukorrhoea, menorrhagia, roundworm, spermatorrhea, Parkinson's; Generally, this herb, is used with amalaki, ashwagandha, shatavari gokshura, white and black musali to make pills and jellies. Roots are used in fevers, edema, elephantiasis (externally), nervous disorders, including facial paralysis. This ayurvedic herb is an annual climbing shrub common in the tropics of India; legumes are eaten as a vegetable.

Long Pepper biological known as *Piper longum* (Pipal). The fruit is used as analgesic, anthelmintic, aphrodisiac, carminative, expectorant.

Shatavar is biological names as *Asparagus racemosus*. The Root of this plant are used remedically for mucilaginous, antidiarrhetic, refrigerant, diuretic, antidysenteric, nutritive, tonic, demulcent, galactagogue, aphrodisiac, antispasmodic, stomachic.

The present study has been taken to assess the effect of BecadaxamiForte on the physical performance of players.

## MATERIALS AND METHODS

To assess the effect of Allopathy preparation Becadaxami Forte on the physical performance of players, a study was conducted on 18 male Soccer players. All these players were divided into two groups experimental and control consisting of 9 players each. All the players were monitored for the same diet, since all of them were stayed in the same hostel and meal was provided by a single mess. A double blind randomized placebo controlled study was conducted. In the experimental group each player was supplemented with one capsule thrice a day of Allopathy preparation BecadaxamiForte with milk. These capsules does not contain any narcotic and banned substance and does not have any side effect. A certificate from the drug inspection department was taken prior to supplementation. Each capsule was comprising of total 510 mgms mixture of Allopathy preparation of following ingredients:-

INGREDIENT	WEIGHT	LOCAL NAME	LATIN NAME	PART USED
Ashwagandha Extract	50 mgms	Asgandh	Ext. Withania Somniferra	Root-Extract
Aamalki Extract	50 mgms	Aamla	Ext. Emblica Officinalis	Fruit-Extract
Giloy Extract	30 mgms	Gily	Ext. Cocculus Cordifolius	Steam-Extract
Madhuyashthi Extract	30 mgms	Mulethi	Ext. Glycyrrhiza Glabra	Root-Extract
Pushkar Mool Extract	30 mgms	Pokhar Mood	Ext. Saussurea Lappa	Root-Extract
Brahmi Extract	20 mgms	Brahmi	Ext. Hydrocotyle Asiatica	Whole Plant Extract
Jiwanti Extract	30 mgms	Jiv/anti	Ext. leptadania Heticulata	Whole Plant Extract
Kaunch Extract	30 mgms	Kaunch	Ext. Mucuna Pruriens	Seed Extract
Shatavar	50 mgms	Shatawar	Asparagus Officinalis	Roots
Vidari Kand	50 mgms	Vidari Kand	Ipomoea Digitata	Rhizome
Shudh Shilajeet	45 mgms	Shilajeet	Ashphaltum	Exudate
Mukta Pisti	15 mgms	Mukta	Mytilus Margartiferus	Pishti
Praval Pisti	20 mgms	Praval	Corallium Rubrum	Pishti
Saffron	05 mgms	Kasar	Crocus Sativus	Stigma
Varch	20 mgms	Varch	Acorus Calamus	Rhizome
Pippali	20 mgms	Pippali	Piper Longum	Fruit
Elachi	15 mgms	Elachi	Elettaria Cardamomum	Seeds

Each player of control group was also supplemented with the placebo capsules, one capsule thrice a day with milk. The placebo capsules were also similar in texture and look to the Allopathy preparation capsules given to experimental group. Even the Coach of the players was also not appraised of it. Both the groups were supplemented in double blind randomized placebo controlled study way for 60 days. The dose of one capsule-thrice day was planned keeping in view of weight of the players. Since all the players were within 55-60 weight category, hence all were provided with this dose. Physical tests to measure Cardiovascular Fitness, Power, Speed and Agility viz. 2.4 Km Distance Runs, Standing Broad Jump, 30 Mtr. Dash and Shuttle Run respectively were administered to assess the effect of Allopathy preparation on the physical performance of Soccer players. These tests were measured immediately before the supplementation, after 30 days of supplementation and after 60 days of supplementation of capsules to both the groups in a double blind randomized placebo controlled study.

The details of the tests are as follows:-

#### **2.4 Km Distance Run**

*Objective:* The test was organised to measure the cardiovascular fitness of the players.

*Equipment:* A stopwatch and a track.

*Directions:* A group of players consisting of 9 players was directed to stand on the starting point. The tester then made the command "Ready? Go!" The subjects were told that they may walk whenever they feel necessary. The spotters were standing on the finish lines of each player. The time taken to cover the 2.4 Km Distance Run was noted down by the spotters through sophisticated stop watches. The score was time elapsed in minutes and seconds to cover 2.4 Km Distance Run.

#### **Standing Broad Jump**

*Objective:* To measure the athletic power of the legs in jumping forward.

*Equipment:* Mat on Floor, Marking material, tape to measure the distance along the landing area.

*Directions:* With the feet parallel to each other and behind the starting mark, the performer bends the knees and swung the arms and jumped as far forward as possible. The distance covered between the starting line and the nearest heel, upon landing was the score. Three trials were permitted and then the best trial was recorded as the score.

#### **Shuttle Run**

*Objective:* To measure the agility of the performer in running and changing direction.

*Equipment:* Marking tap, Stop Watch and 2 blocks of wood.

*Directions:* The performer started behind the starting line on the signal "Go" and ran to the blocks, picked up one, returned to the starting line, and placed block behind the ' line; he then repeated the process with second block. He was allowed rest between the two trials. The length of the time required to complete the course was recorded as score. Out of two trials best score was noted down.

#### **30 Mtr Dash**

*Objective:* To measure the speed.

*Equipment:* Stopwatch, Running area.

*Directions:* The subject was directed to stand on the starting line. On the command "Go" he started run at maximum speed as possible. The elapsed time between starting line and finish line was noted in minutes and second. This elapse of time was score taken by the subject. experimental nor in the placebo group. Table II and Table IV is showing the mean, standard deviations and t-test of the values obtained after supplementation to both the groups. But, after 60 days of supplementation it was noted down that there was significant improvement in the power, speed and agility in the experimental group to whom Allopathy preparation was supplemented; the same was assessed through standing broad jump, 30 mtrs, Dash and shuttle run respectively. But no such type of significant improvement was noted down in the control group to whom the placebo capsules were supplemented. Table III and IV showing the findings in the form of mean, standard deviations and t-test after 60 days of supplementation to both the groups.

### **RESULTS AND DISCUSSION**

Results were noted down of both the experimental and control group, At basal stage the performance of players was noted down through physical tests viz. 2.4 Km distance run, Standing Broad Jump, 30 Mtr. Dash & Shuttle Run to assess the cardiovascular fitness, power, speed and agility respectively: Table I is showing the mean and standard deviation of cardiovascular fitness, power, speed and agility of both experimental and control group. At basal stage both the groups were showing same physical performance and there was similar status of cardiovascular fitness, power, speed and agility. Similar tests were conducted after 30 days and 60 days on both the groups; after supplementation of allopathy preparation to experimental group and control group. After 30 days of supplementation to both the groups there was no significant improvement.

**Physical tests values of experimental & control groups at basal stage**

PHYSICAL TEST	EXPERIMENTAL GROUP		CONTROL GROUP	
	MEAN	STD. DEV.	MEAN	STD. DEV.
2.4 Km. Distance Run	10.40	3.48	8.55	0.59
Standing Broad Jump	2.41	0.18	2.36	0.12
30 Mtr. Dash	3.88	0.18	3.96	0.18
Shuttle Run	14.17	0.52	14.23	0.11

**PHYSICAL TESTS VALUES OF EXPERIMENTAL & CONTROL GROUPS AFTER 30 DAYS OF SUPPLEMENTATION STAGE**

PHYSICAL TESTS	EXPERIMENTAL GROUP		CONTROL GROUP	
	MEAN	STD. DEV.	MEAN	STD. DEV.
2.4 Km. Distance Run	8.59	0.43	8.49	0.59
Standing Broad Jump	2.50	0.12	2.41	0.12
30 Mtr. Dash	3.88	0.18	3.93	0.16
Shuttle Run	14.17	0.41	14.25	0.40

**PHYSICAL TESTS VALUES OF EXPERIMENTAL & CONTROL GROUPS AFTER 60 DAYS OF SUPPLEMENTATION STAGE**

PHYSICAL TESTS	EXPERIMENTAL GROUP		CONTROL GROUP	
	MEAN	STD. DEV.	MEAN	STD. DEV.
2.4 Km. Distance Run	8.96	0.43	8.59	0.48
Standing Broad Jump	2.39	0.13	2.33	0.14
30 Mtr. Dash	3.91	0.17	3.97	0.17
Shuttle Run	14.23	0.44	14.36	0.42

**t- VALUES OF EXPERIMENTAL GROUP**

	BASAL VS 30 DAYS	BASAL VS 60 DAYS'	15 DAYS VS 30 DAYS
2.4 Km. Distance Run	0.15	0.24	0.09
Standing Broad Jump	0.17	0.93*	0.10
30 Mtr. Dash	0.78	0.94*	0.72
Shuttle Run	0.68	0.91*	0.74

Significant at .01 &gt; 0.874 &lt;

**t-VALUES OF CONTROL GROUP**

	BASAL VS 30 DAYS	BASAL VS 60 DAYS	15 DAYS VS 30 DAYS
2.4 Km. Distance Run	0.52	0.74	0.69
Standing Broad Jump	0.61	0.53	0.25
30 Mtr. Dash	0.47	0.77	0.65
Shuttle Run	0.78	0.36	0.58

Significant at .01 &gt; 0.874 &lt;

**CONCLUSION**

It was concluded that the ingredients of Allopathy preparation Becadaxamiforte enhance the power, speed and agility of the players which in turn enhances the physical performance. Although there was no significant improvement was noted down in the cardiovascular fitness of the players in either group, but it may be due to short duration of study and less number of subjects. Also the effect of this Allopathy preparation on the VO<sub>2</sub> max of players, which is a vital test while analyzing the physical performance of players, is not identified. Hence it is necessary that a complete project on this study be made and in-depth study of minimum 6 months supplementation is required to substantiate the influence of this Allopathy preparation and in the subsequent study physiological parameters viz. VO<sub>2</sub> max, anaerobic threshold and lactate tolerance may also be evaluated.

**Acknowledgement**

The Authors thank the authorities of King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia, and St. Francis College, Hyderabad and the subjects of Osmania University, Hyderabad, India for their help in completion of this study.

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