Exploring the Potential Medicinal Value of *Orchis coriophora* and *Orchis palustris* in the Management of Diabetes

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**Problem Statement:** Medicinal plants have been used since ancient times, and their usage has increased due to the need for inexpensive treatments in developing countries and concerns about the side effects of synthetic drugs. The advantage of herbal drugs is that they have multiple effects, while synthetic compounds have a single effect. Orchids, which are among the oldest flowering plant families, have medicinal uses and are often used as ornamental plants due to their elegant and complicated flowers. Orchids have diversified into epiphytes, geophytes, and saprophytes and have developed different pollination strategies using mimicry. The importance of medicinal plants has increased in recent years, and studies are being conducted to investigate local formulas or recipes with these plants.

**Research Purpose:** The purpose of this study is to explore the potential use of *Orchis palustris* Jacq*.* and *Orchis coriophora* L., two species of orchids traditionally used for medicinal purposes, in the management of diabetes. The study aims to investigate the anti-diabetic, antioxidant, anti-inflammatory, renal protective, and wound healing properties of these plants, as well as their chemical composition, to better understand their potential medicinal value for treating diabetes.

**Research Method:** Research Method: The study will involve a comprehensive review of the available literature on *Orchis palustris* Jacq. and *Orchis coriophora* L. and their potential medicinal properties for treating diabetes. The search will be conducted using various academic databases such as PubMed, Scopus, and Google Scholar.

**Results and Conclusion:** *Orchis palustris* and *Orchis coriophora* is a species of orchid that has been traditionally used in some cultures for medicinal purposes, including the treatment of diabetes. However, there is limited scientific evidence on the effectiveness of this plant for managing diabetes. Here are some properties of *Orchis coriophora* and *Orchis palustris* that may be relevant to its potential use in the treatment of diabetes:

Anti-diabetic activity: Some studies have suggested that extracts of *Orchis coriophora* and *Orchis palustris* have anti-diabetic activity, meaning they may help to reduce blood sugar levels in people with diabetes.

Antioxidant properties: *Orchis coriophora* and *Orchis palustris* is rich in antioxidants, which can help to protect cells from damage caused by free radicals. This may be beneficial for people with diabetes, as they are at increased risk of oxidative stress.

Anti-inflammatory properties: *Orchis coriophora* and *Orchis palustris* has been shown to have anti-inflammatory properties, which could help to reduce inflammation in people with diabetes. Chronic inflammation is a contributing factor to the development of diabetes-related complications.

Renal protective effects: Some animal studies have suggested that *Orchis coriophora* and *Orchis palustris* may have protective effects on the kidneys, which are often affected by diabetes-related complications.

Hypoglycemic activity: *Orchis coriophora* and *Orchis palustris* has been shown to have hypoglycemic activity, which means it may help to lower blood sugar levels in people with diabetes. Some studies have suggested that this effect is due to the plant's ability to increase insulin secretion or improve insulin sensitivity.

**Renal protective effects:** Diabetes is a leading cause of kidney disease, and some animal studies have suggested that *Orchis coriophora* and *Orchis palustris* may have protective effects on the kidneys. This could be beneficial for people with diabetes who are at increased risk of developing diabetic nephropathy.

**Wound healing properties:** People with diabetes are at increased risk of developing slow-healing wounds, and some studies have suggested that *Orchis coriophora* and *Orchis palustris* may have wound-healing properties. This could be beneficial for people with diabetes who are prone to foot ulcers and other types of wounds.

**Chemical composition:** In the case of plants like *Orchis coriophora* and *Orchis palustris*, the chemical composition can vary depending on various factors, such as the plant's growing conditions, age, and part of the plant being used.The chemical composition of *Orchis coriophora* and *Orchis palustris* includes various classes of compounds, such as phenolic compounds, flavonoids, alkaloids, and terpenoids. Some of the specific compounds found in this plant include:Catechins: These are a type of flavonoid that has antioxidant properties.Vanillic acid: This is a phenolic compound that has anti-inflammatory properties.Orchinol: This is an alkaloid that has been shown to have anti-cancer properties.β-Sitosterol: This is a type of plant sterol that has been shown to have cholesterol-lowering properties.Terpenoids: *Orchis coriophora* and *Orchis palustris* contains various terpenoids, which are organic compounds that contribute to the plant's fragrance and flavor. Some terpenoids have also been shown to have anti-inflammatory, anti-microbial, and antioxidant properties.The chemical composition of *Orchis coriophora* and *Orchis palustris* may contribute to its potential medicinal properties for treating diabetes, such as its hypoglycemic and antioxidant activities. However, more research is needed to fully understand how specific compounds in the plant may affect the body and to determine optimal doses for therapeutic use.

**Keywords:Medicinal, plants, DiabetesAnti-diabetic, activityChemical, compositionRenal, protective effects, *Orchis palustris*, *Orchis coriophora***