Background: Herbal medicine has been used in the traditional system of medicine for the treatment of various form of human health complication including insulin resistance. Prunin is a flavonoidal class secondary metabolite found to be present in the different medicinal plants including *Prunus davidiana*. Amount of prunin in plant material has been dependent upon the climatic changes.

Methods: In order to know the therapeutic importance of prunin in the medicine, here in the present work important scientific data has been collected from various literature sources and analyzed. Biological importance of prunin for the treatment of various forms of diabetes and associated complication has been developed in the present work through scientific data analysis of various literature works.

Results: Literature data analysis revealed the biological importance of prunin in the medicine through different experimental works associated with hyperglycemia and hyperlipidemia in diabetic rats. Literature data analysis revealed the biological importance of prunin in the medicine through inhibition of α-glucosidase and stimulation of glucose uptake in insulin-resistant hepatocytes. Further detailed pharmacological study revealed the biological importance of prunin in the medicine as a selective anti-diabetic potential.

Conclusion: Literature data analysis revealed the biological importance of pruning in the medicine for the treatment of diabetes.

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