

Asphalt mix reinforced with vegetable fibers

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Abstract. The use of a larger share of renewable materials in road construction is a trend that in the long term cannot be avoided. In some cases, due to this pressure, new innovative opportunities are generated. This article attempts to outline and bring one of such opportunity. The article describes selection and the use of special natural fibers from renewable natural resources adapted for use in various types of asphalt mixtures to improve the range of properties. Experimental results showed an improvement in stiffness modulus, indirect tensile strength (ITS) and good resistance to permanent deformation of blends containing vegetable fibers. This is a new topic in the road construction. But the results have so far proven that the used type of fibers can be a perspective way, as simple and in line with the policy of sustainable development, to improve the properties (reinforce) of the asphalt mixtures.