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Scientists obtain anticancer medicines from the elecampe, a wild plant growing in the Mediterranean

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This release is available in Spanish.

A group of scientists from the Department of Organic Chemistry and the Biotechnology Institute of the University of Granada have found out that the plant Dittirichia viscose, known as elecampe, can be used to obtain inhibitors of neurogenic vasodilatation, a significant progress in migraine and cancer treatments.

The study, supervised by professors **Mara del Mar Herrador** and **Alejandro Fernndez Barrero**, has been carried out by **Julieta Vernica Cataln**, assistant professor of the National University of Tucuman (Argentina) and researcher of the University of Granada, and it has been financed by the Unin Europea through the Programa Alban and the Ministerio de Ciencia y Tecnologa. Julieta Vernica used the elecampe plant, abundant in the Mediterranean area, to obtain a method for taking out and purifying a natural product known as ilicic acid.

A promising angiogenesis inhibitor

This acid has been used to develop an effective method of chemical synthesis and of industrial interest towards the pharmacologically active &-eudesmol (against migraine) and -eudesmol which inhibits in vivo selectively, the proliferation of endothelial cells, being a promising antiangiogenic.

Likewise, these researchers have made another important discovery: they have used the germacrona compound, obtained from the Baccharis latifolia, a plant growing in the Bolivian Andes, in a new chemical synthesis of the antitumoral -element. This natural product serves to inhibit selectively the vascular endothelial brain cells and it has been used as an agent to prevent cancer in brain tumours and metastases from brain and lung cancer, preventing its growth. Besides, it has been proved that it leads to apoptosis and stops the cellular differentiation process and inhibits neoplasm metastases, so it can be used in lung neoplasm chemotherapy as well as in colon, stomach or brain chemotherapy, etc. There are several patented formulas for its use alone or combined with other agents such as taxol, 5- Fu or stemmed from cisplatin.

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