



# Turkish Journal of Agriculture and Forestry

Turkish Journal

of

Agriculture and Forestry

 [Keywords](#)  
 [Authors](#)



[agric@tubitak.gov.tr](mailto:agric@tubitak.gov.tr)

[Scientific Journals Home Page](#)

**Response of *Apis mellifera syriaca* and *A. m. armeniaca* to Nectar Variations:  
Implications for Agriculture**

İbrahim ÇAKMAK

Uludağ University, Faculty of Agriculture, Department of Animal Science, Görükle,  
Bursa-TURKEY

Harrington WELLS

University of Tulsa, Biological Science, Tulsa, Oklahoma 74104 USA

Çetin FIRATLI

Ankara University, Faculty of Agriculture, Department of Animal Science, Ankara-  
TURKEY

**Abstract:** The foraging ecology of *Apis mellifera syriaca* and *A. m. armeniaca* was studied using artificial flower patches consisting of blue, white, and yellow flowers. Two experiments were performed with each race. Experiment I examined forager response to differences in sucrose reward molarity (quality of reward) associated with flower colors. Experiment II varied the quantity of sucrose reward associated with flower colors. *A. m. syriaca* and *A. m. armeniaca* each responded to quality and quantity differences between blue and white flowers. Prior studies show that *A. m. caucasica* and *A. m. ligustica* respond to reward quality difference, but they do not respond to reward quantity difference between blue and white flowers. However, all four subspecies partition foragers between yellow flowers, and the group consisting of blue-white flowers. The basic foraging differences of *Apis mellifera* subspecies may be useful for different agricultural pollination tasks to increase large scale crop productivity.

---

Turk. J. Agric. For., **22**, (1998), 561-572.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Agric. For., vol.22, iss.6.](#)