

Turkish Journal of Agriculture and Forestry

Turkish Journal

of

Agriculture and Forestry

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



agric@tubitak.gov.tr

[Scientific Journals Home Page](#)

Isosteric Sorption Heat Determination for some Starchy Grains

Serdar ÖZTEKİN, Yurtsever SOYSAL Çukurova Üniversitesi, Zir. Fak. Tarım Makinaları Bölümü, 01330 Adana - TÜRKİYE e-mail: oztekin@mail.cu.edu.tr Abstract : In this study, isosteric sorption heat for 8 different starchy grains was determined by the application of the Clausius- Clapeyron equation to sorption isotherms. The latent heat of vaporisation of free water was not significantly different from the isosteric sorption heats of barley, durum wheat, oats, sorghum (31) and sorghum above 14% d.b. moisture content. There was no significant difference among the latent heat of vaporisation of free water and isosteric sorption heats of soft wheat, hard wheat and wheat (Waldron) above the 17% moisture content. Isosteric sorption heat of soft wheat was calculated to be 3341.5 kJ kg⁻¹ at a moisture content of 10%. This is the highest value obtained for all the starchy grains tested.

Key Words: Isosteric sorption heat, sorption isotherms, starchy grains

Turk. J. Agric. For., **24**, (2000), 713-719.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Agric. For.,vol.24,iss.6.](#)