



Year: 2006

Vol.: 69

Fasc.: 3

**Title:** Power values of sums of binary forms

**Author(s):** L. Hajdu and Zs. Turi-Nagy

In this note we obtain some finiteness results for the solutions of diophantine equations of the shape  $f(x, y) + g(x, y) = bz^m$ , where  $f, g \in \mathbb{Q}[x, y]$  are binary forms such that the roots of  $f(x, 1)$  and  $g(x, 1)$  form arithmetic progressions. Our theorems provide common generalizations of some results of GYÖRY, HAJDU and SARADHA [12], DARMON and GRANVILLE [10], YUAN [26] and BILU, KULKARNI and SURY [6].

**Address:**

L. Hajdu

Institute of Mathematics

University of Debrecen

and

The Number Theory Research Group of the Hungarian Academy of Sciences

H-4010 Debrecen, P.O.B. 12

Hungary

*E-mail:* hajdul@math.klte.hu

**Address:**

Zs. Turi-Nagy

Institute of Mathematics

University of Debrecen

H-4010 Debrecen, P.O.B. 12

Hungary

*E-mail:* z1t2n3@freemail.hu