ERRATUM/ADDITION FOR ON THE CASAS-ALVERO CONJECTURE

JAN DRAISMA AND JOHAN P. DE JONG

Christiaan van de Woestijne pointed out a flaw in the proof of Theorem 7: in the case where n'=4 the prime p=5 also needs to be excluded. Indeed, modulo 5 the resultants $-b^2(4a^3+27b^2)$ and $a(25a^3+216b^2)$ on page 33 vanish identically for b=0 and a arbitrary. This means that the case n=20 of the Casas-Alvero conjecture is still open, contrary to the claim just after Theorem 7.

Christiaan also computed the exact values of $\beta_1, \beta_2, \beta_3$ in the example on page 31; they are $\beta_1 = \beta_3 = 1/2 + \sqrt{15}/30$ and $\beta_2 = 1/2 + \sqrt{15}/10$.

 $Date \hbox{: August 2011}.$