

# Hydroxamic acids accumulation by wheat callus

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Hydroxamic acids were quantified by HPLC in leaves of one-week-old seedlings and in 30 day-old callus tissues of four wheat cultivars. Leaves accumulated preferentially 2,4-dihydroxy-7-methoxy-1,4-benzoxazin-3-one (DIMBOA). 2,4-Dihydroxy-1,4 (DIBOA) was detected only in cv SNA-3. By contrast, callus tissues accumulated both compounds and in cv Millaleu the only compound detected was DIBOA. The amount of hydroxamic acids in 30-day-old callus tissues was higher than in seven-day-old leaves in all cultivars. In addition, as cv SNA-3 callus aged the concentration of DIBOA decreased, and DIMBOA concentration increased. The results suggest that DIMBOA originates from DIBOA. © 1990.