AGROTECHNOLOGY & FOOD INNOVATIONS
WAGENINGEN UR

Effect of sprayer speed on spray drift

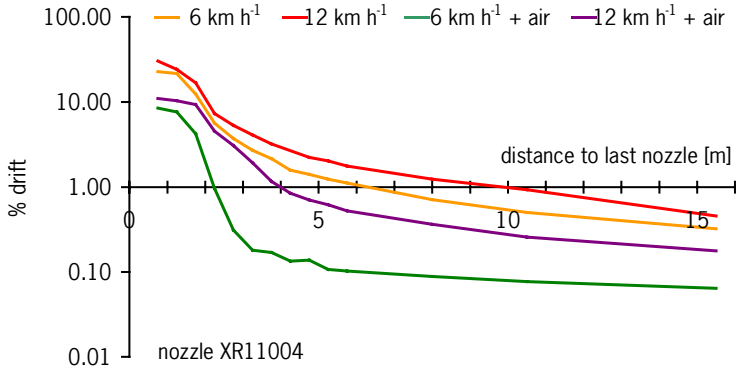
Jan van de Zande, Hein Stallinga, Jean-Marie Michielsen, Pleun van Velde

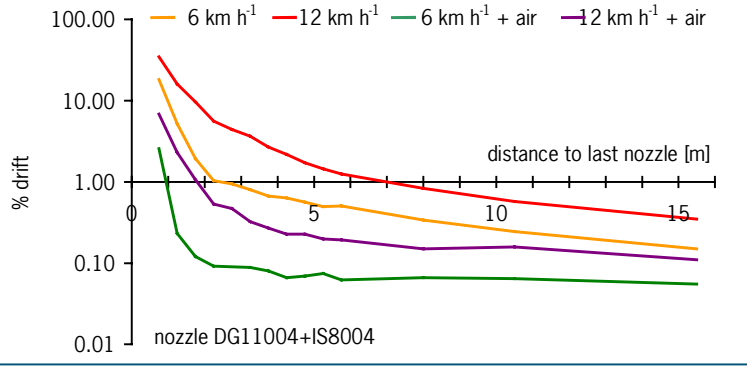
Aim

Assess the effect of field sprayer speed on spray drift for two nozzle types and air assistance.

Material & methods

- Sprayer: Hardi Commander TwinForce
- Nozzles (3 bar): XR11004, DG11004+IS8004
- Boom height: 50 cm
- Air assistance: no, full air
- Sprayer speed: 6 and 12 km h^{-1}





Results

Drift reduction (%) of 6 and 12 km h^{-1} at zones 2-3 m and 1-5 m from last nozzle comp. nozzle XR11004 and 6 km h^{-1}.

Nozzle	Air	Speed [km h^{-1}]	Drift reduction at [m]	
			2-3	1-5
XR11004	-	6	*	*
		12	-34	-22
	+	6	86	73
		12	19	38
DG11004 +IS8004	-	6	79	77
		12	-7	10
	+	6	98	98
		12	89	89

Conclusions

- With higher speeds more spray drift
- Drift reducing effects of nozzle type and air assistance differ for 6 and 12 km h^{-1}.

Agrotechnology & Food Innovations B.V.
Postbus 17, 6700 AA Wageningen
Tel 0317 475029
Fax 0317 475347
E-mail info.agrotechnologyandfood@wur.nl
Internet www.agrotechnologyandfood.wur.nl