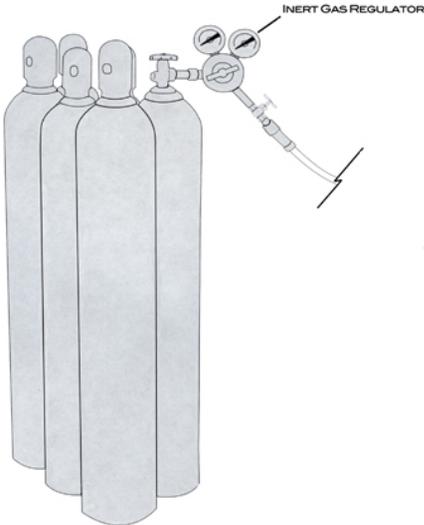
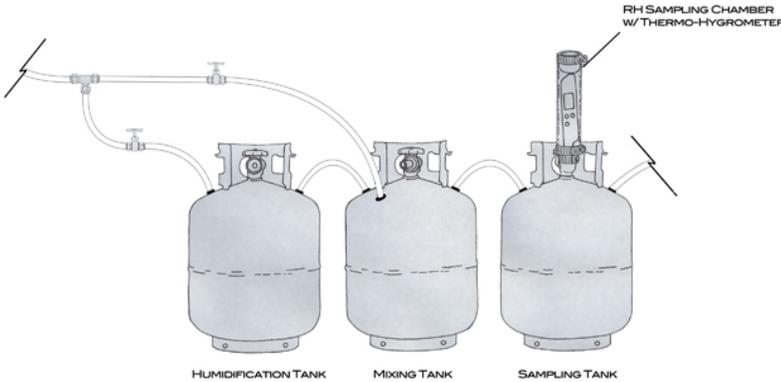


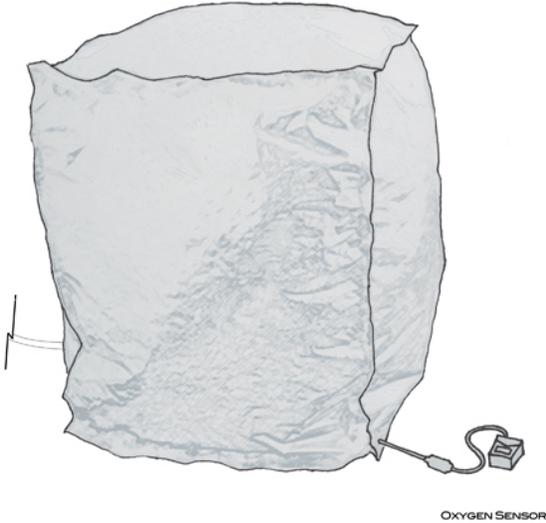
INERT GAS HUMIDIFICATION SYSTEM FOR ANOXIA



ULTRA-HIGH PURITY NITROGEN CYLINDERS



ALUMINUM HUMIDIFICATION CYLINDERS



ALUMINIZED POLYETHYLENE CHAMBER



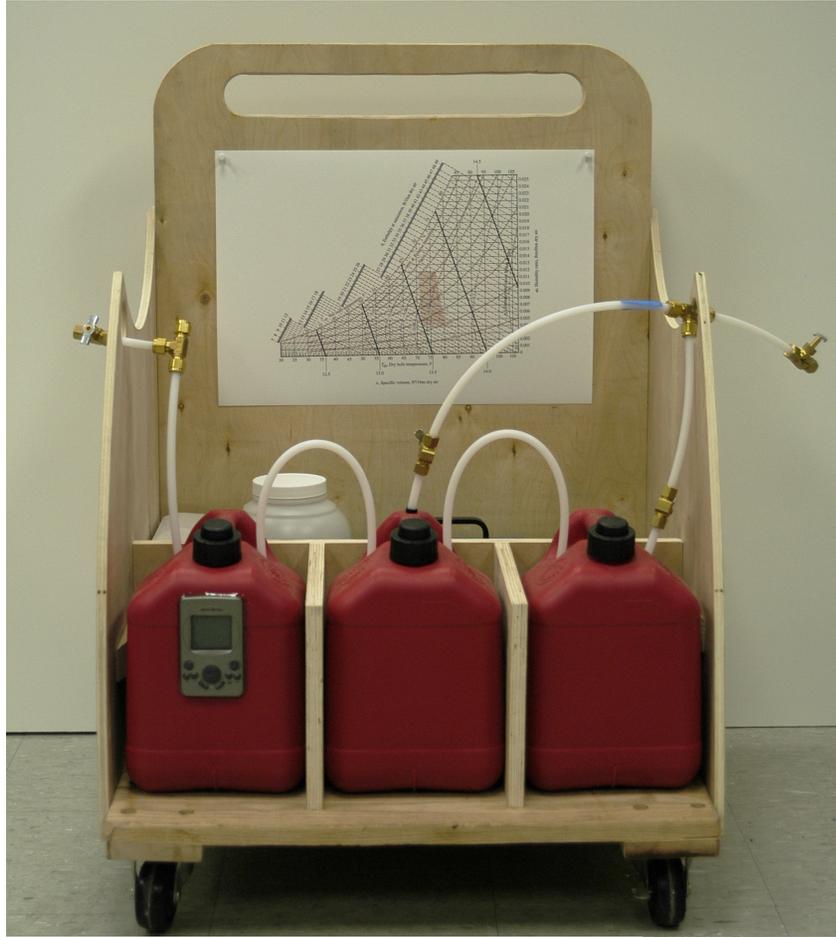
Inert Gases in the Control of Museum Insect Pests

Charles Selwitz
Shin Maekawa

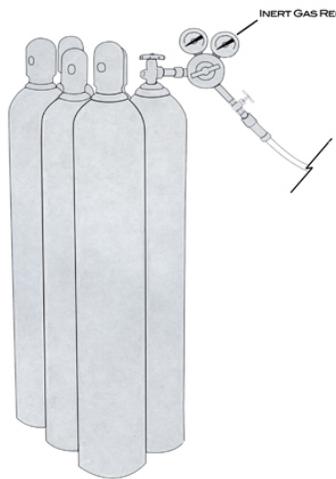
Table 2.3

Minimum time recorded for assured 100% kill of all life stages of common museum pests.

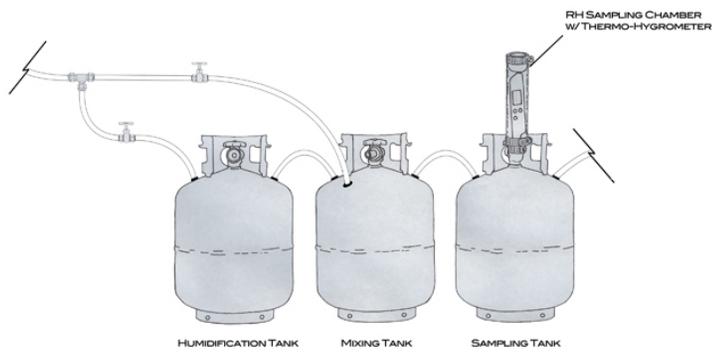
Species	Oxygen (ppm)	Inert gas	Temp. (°C)	% Relative humidity	Time (h)	Reference
American cockroach	<1000	Nitrogen	25	55	120	Rust and Kennedy (1993)
Black carpet beetle	300	Nitrogen	30	40	72	Valentín(1993)
	300	Argon	30	40	48	Valentín (1993)
Book beetle	300	Nitrogen	30	40	72	Valentín (1993)
	300	Argon	30	40	48	Valentín (1993)
Brownbanded cockroach	<1000	Nitrogen	25	40	72	Rust and Kennedy (1993)
Cabinet beetle	<1000	Nitrogen	25	55	120	Rust and Kennedy (1993)
Cigarette beetle	4200	Nitrogen	30	65-70	168	Gilberg(1989a)
	<1000	Nitrogen	25	55	192	Rust and Kennedy (1993)
	300	Nitrogen	30	40	144	Valentín (1993)
Confused flour beetle	300	Argon	30	40	96	Valentín (1993)
	<1000	Nitrogen	25	55	96	Rust and Kennedy (1993)
Drugstore beetle	300	Nitrogen	30	40	144	Valentín (1993)
	300	Argon	30	40	96	Valentín (1993)
Drywood termite	4200	Nitrogen	30	65-70	168	Gilberg(1989a)
	10,000	Nitrogen	22	40	360	Valentín and Preusser (1989)
Firebrat	<1000	Nitrogen	25	40	48	Rust and Kennedy (1993)
Fruit fly	5000	Nitrogen	30	75	80	Valentín and Preusser (1989)
Furniture beetle	300	Nitrogen	30	40	168	Valentín (1993)
	300	Argon	30	40	120	Valentín (1993)
Furniture carpet beetle	<1000	Nitrogen	25	55	72	Rust and Kennedy (1993)
German cockroach	<1000	Nitrogen	25	55	24	Rust and Kennedy (1993)
Larder beetle	<1000	Nitrogen	25	55	96	Rust and Kennedy (1993)
Longhorn borer beetle	300	Nitrogen	30	40	240	Valentín (1993)
	300	Argon	30	40	168	Valentín (1993)
Powderpost beetle	300	Nitrogen	30	40	120	Valentín (1993)
	300	Argon	30	40	72	Valentín (1993)
	<1000	Nitrogen	25	55	120	Rust and Kennedy (1993)
Rice weevil	4200	Nitrogen	30	65-70	168	Gilberg(1989a)
	10,000	Nitrogen	20	12	1000	Banks and Annis (1977)
Varied carpet beetle	10,000	Nitrogen	26	12	500	Banks and Annis (1977)
	4200	Nitrogen	30	65-70	168	Gilberg(1989a)
Webbing clothes moth	<1000	Nitrogen	25	55	96	Rust and Kennedy (1993)
	4200	Nitrogen	30	65-70	168	Gilberg(1991)
Western drywood termite	<1000	Nitrogen	25	55	96	Rust and Kennedy (1993)



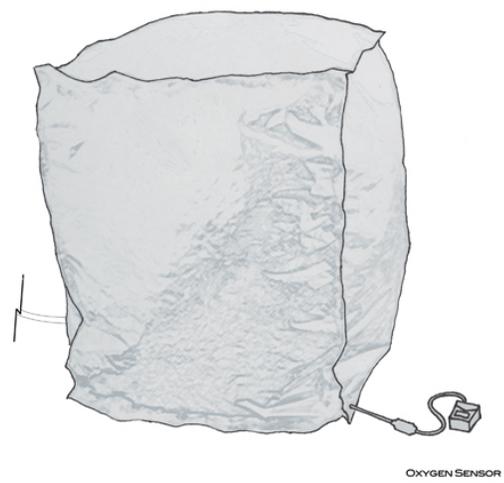
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