

ANNEX IV

Specialized equipment for seed genebanks

(The list is not exhaustive and mention of suppliers does not necessarily constitute endorsement)

No	Item	Specification/Purpose	Supplier
1	Balance, analytical	Weighing up to four decimal places, required for seed moisture content determination using small samples	<p>Mettler-Toledo (Schweiz) AG Im Langacher CH-8606 Greifensee Switzerland Phone: (41) 1 944 45 45 Fax: (41) 1 944 45 10 Email: info.ch@mt.com Web: www.mt.com</p> <p>Ohaus Corporation P.O. Box 2033 19A Chapin Road Pine Brook, NJ 07058 USA Phone: (1) 973 377 9000 Fax: (1) 973 593 0359 Email: Sales@Ohaus.com Web: www.ohaus.com</p> <p>Sartorius AG Weender Landstrasse 94-108 D-37075 Goettingen Germany Phone: (49) 551 308 0 Fax: (49) 551 308 3289 Email: wt.sales@sartoriuscorp.com Web: www.sartorius.com</p> <p>Cole-Parmer Instruments Co. 625 East Bunker Court Vernon Hills, IL 60061-1844 USA Phone: (1) 847 549 7600 Fax: (1) 847 549 1700 Email: sales@coleparmer.com Web: www.coleparmer.com</p> <p>Fisher Scientific 2000 Park Land Dr. Pittsburg, PA 15275-9943 USA Phone: (1) 973 467-6511 Fax: (1) 800 926 1166 Web: www.fishersci.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road P.O. Box No. 42, Ambala Cantt. - 133 001 Haryana India Phone: (91) 171-2699347/2699267 Fax: (91) 171-2699222/2699102 Email: eenquiry@indosaw.com</p> <p>Thomas Scientific P.O. Box 99 Swedesboro, NJ 08085 USA Phone: (1) 800-524-0018 Fax: (1) 856-467-3087 Email: global@thomassci.com Web: www.thomassci.com</p>

<p>2</p>	<p>Balance, moisture determination</p>	<p>Combining heating with highly accurate weighing technology to deliver a fast and precise method of moisture analysis</p>	<p>Mettler-Toledo (Schweiz) AG Im Langacher CH-8606 Greifensee Switzerland Phone: (41) 1 944 45 45 Fax: (41) 1 944 45 10 Email: info.ch@mt.com Web: www.mt.com</p> <p>Ohaus Corporation P.O. Box 2033 19A Chapin Road Pine Brook, NJ 07058 USA Phone: (1) 973 377 9000 Fax: (1) 973 593 0359 Email: Sales@Ohaus.com Web: www.ohaus.com</p> <p>Sartorius AG Weender Landstrasse 94-108 D-37075 Goettingen Germany Phone: (49) 551 308 0 Fax: (49) 551 308 3289 Email: wt.sales@sartoriuscorp.com Web: www.sartorius.com</p> <p>Hoffman Manufacturing Co. 353 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312-738-3700 Fax: (1) 312-738-5329 Email: sales@seedburo.com Web: www.seedburo.com</p>
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<p>3</p>	<p>Cold rooms – medium/long-term</p>	<p>Cold storage modules made of prefabricated polyurethane insulating panels; panels should be 150 mm thick and constructed for long-term storage (-20°C) or 75 mm thick and for medium-term storage (+5°C); floor insulated and heavy duty, door-hinged type; heated seal for long-term storage, fitted with transparent PVC strip curtain; refrigeration system to provide adjustable controlled environment of -20°C to 10°C; dehumidification system to provide 30-40% RH where required; control panel displaying temperature and RH provided outside</p>	<p>BMIL International, Inc. 61 Broadway Suite 1900 New York NY 10006-2701 USA Phone: (1) 212 898 9699 Fax: (1) 212 514 9234 Email: bmil@bmil.com Web: www.bmil.com</p> <p>Huurre Group Oy. PO Box 127 FIN-33101 Tampere Finland Phone: (358) 20 5555 11 Fax: (358) 20 5555 360 Email: info@huurre.com Web: www.huurre.com</p> <p>Foster Refrigerator Oldmedow Road King's Lynn Norfolk, PE30 4JU United Kingdom Phone: (44) 1553 691122 Fax: (44) 1553 691447 E-mail: sales@foster-uk.com Web: www.Fosterrefrigerator.co.uk</p> <p>Watford Refrigeration & Air Conditioning Ltd. Wiggenhall Industrial Estate Watford, WD1 8AW, UK United Kingdom Phone: (44) 1923 227726 Fax: (44) 1923 233525 Email: sales@watref.co.uk Web: www.watref.co.uk</p>
<p>4</p>	<p>Containers a. Aluminium foil bags b. Aluminium cans, Glass bottles</p>	<p>Aluminium foil bags - laminated, made of three layers: polyester on the outside, aluminium in the middle and polyethylene on the inside, and puncture resistant</p> <p>Cans, sealed or with screw caps fitted with rubber gasket; Glass bottles fitted with polypropylene lids</p>	<p>Barrier Foil Products Co. Hollands Mill 61 Shaw Heath Stockport, SK3 8BH United Kingdom Phone : (44) 161 4804007 Fax : (44) 161 4747412 Email: BARRIERFOIL@aol.com</p> <p>Embarcadero Home Cannery 2026 Livingston Street Oakland, CA 94606 USA Phone: (1) 510 535 2311 Fax: (1) 510 535 2235 Email: contact_ehcan@hotmail.com Web: www.ehcan.com</p>

5	Data loggers	Continuous logging of temperature and RH data in cold rooms and freezers and to record field observations	<p>OAKTON Instruments P.O. Box 5136, Vernon Hills, IL 60061, USA Phone: (1) 888 462 5866 Fax: (1) 847 247 2984 Email: info@4oakton.com Web: www.4oakton.com</p>
6	Dehumidifier	Rotary type with high performance activated silica gel or other desiccant wheel	<p>Bry-Air Inc. 10793 St. Rt. 37W Sunbury, Ohio 43074 USA Phone: (1) 740 965 2974 Fax: 740 965 5470 Email : bryair1@aol.com Web: www.bry-air.com</p> <p>Munters Limited, Blackstone Road Huntingdon Cambridgeshire PE29 6EE United Kingdom Phone: (44) 1480 432243 Fax: (44) 1480 413147 Email: info@munters.co.uk Web: www.munters.com</p>
7	Distillation apparatus	Distilled water for germination testing etc.	<p>Cole-Parmer Instruments Co. 625 East Bunker Court Vernon Hills, IL 60061-1844 USA Phone: (1) 847 549 7600 Fax: (1) 847)549 1700 Email: sales@coleparmer.com Web: www.coleparmer.com</p> <p>Fisher Scientific 2000 Park Land Dr. Pittsburg, PA 15275-9943 USA Phone: (1) 973 467 6511 Fax: (1) 800 926 1166 Web: www.fishersci.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road P.O. Box No. 42, Ambala Cantt. - 133 001 Haryana India Phone: (91) 171 2699347/2699267 Fax: (91) 171 2699222/2699102 Email: eenquiry@indosaw.com</p> <p>Thomas Scientific P.O. Box 99 Swedesboro, NJ 08085 USA Phone: (1) 800 524 0018 Fax:(1) 856 467 3087 Email: global@thomassci.com Web: www.thomassci.com</p>

<p>8</p>	<p>Drying cabinet/room</p>	<p>Rotary absorption dehumidifiers with secondary refrigeration equipment to provide an environment of 15°-20°C and 15%-20% RH for seed drying</p>	<p>Bry-Air Inc. 10793 St. Rt. 37W Sunbury, Ohio 43074 USA Phone: (1) 740 965 2974 Fax: (1) 740 965 5470 Email : bryair1@aol.com Web: www.bry-air.com</p> <p>Hoffman Manufacturing Co. 353 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Huurre Group Oy. PO Box 127 FIN-33101 Tampere Finland Phone: (358) 20 5555 11 Fax: (358) 20 5555 360 Email: info@huurre.com Web: www.huurre.com</p> <p>Munters Limited, Blackstone Road Huntingdon Cambridgeshire PE29 6EE United Kingdom Phone: (44) 1480 432243 Fax: (44) 1480 413147 Email: info@munters.co.uk Web: www.munters.com</p> <p>Watford Refrigeration & Air Conditioning Ltd. Wiggshall Industrial Estate Watford WD1 8AW UK Phone: (44) 1923 227726 Fax: (44) 1923 233525 Email: sales@watref.co.uk Web: www.watref.co.uk</p>
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9	Electronic scale	Weighing up to two decimal places – required at various stages of the seed-handling	<p>Hoffman Manufacturing Co. 353 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Cole-Parmer Instruments Co. 625 East Bunker Court Vernon Hills, IL 60061-1844 USA Phone: (1) 847 549 7600 Fax: (1) 847 5491700 Email: sales@coleparmer.com Web: www.coleparmer.com</p> <p>Fisher Scientific 2000 Park Land Dr. Pittsburg, PA 15275-9943 USA Phone: (1) 973 467 6511 Fax: (1) 800 926 1166 Web: www.fishersci.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road P.O. Box No. 42, Ambala Cantt. - 133 001 Haryana India Phone: (91)171 2699347/2699267 Fax: (91)171 2699222/2699102 Email: eenquiry@indosaw.com</p> <p>Thomas Scientific P.O. Box 99 Swedesboro, NJ 08085 USA Phone: (1) 800 524 0018 Fax: (1) 856 467 3087 Email: global@thomassci.com Web: www.thomassci.com</p>
10	Freezer (chest type/ vertical)	Standard domestic freezers providing -20°C for long-term seed conservation	Locally available (e.g. Revco, Kelvinator, Westinghouse and others)

11	Germination cabinet (Germinator)	Providing very high RH levels, illuminated, with diurnal-cycling control allowing independent selection of day/night temperatures and light	<p>Controlled Environments Limited 590 Berry Street Winnipeg, Manitoba Canada R3H 0R9 Phone: (1) 204 786 6451 Fax: (1) 204 783 7736 Email: sales@conviron.com Web: www.conviron.com</p> <p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany, OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022, W. Jackson Blvd. Chicago, IL 60607 USA Phone.: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Weiss Gallenkemp Ltd. Willowbank House, 84 Station Road Marlow, Buckinghamshire SL7 1NX United Kingdom Phone: (44) 1494 43 43 24 Fax: (44) 1494 43 43 Web: www.weissttechnik.co.uk</p>
12	Global Positioning System (GPS)	Portable and handheld to carry on collecting trips	<p>Garmin International Inc. 1200 East 151st Street Olathe, KS 66062-3426 (Kansas City metro area) USA Phone: (1) 913 397 8200 Fax: (1) 913 397 8282 Web: www.garmin.com</p>
13	Grinder (coffee mill)	Grinding small quantities of seeds for moisture determination	Locally available (Braun, Moulinex, etc)

14	Incubator	With diurnal-cycling control allowing independent selection of day/night temperatures	<p>Percival Scientific, Inc 505 research Drive Perry, Iowa 50220 USA Phone: (1) 515 465 9363 Fax: (1) 515 465 9464 Email: info@percival-scientific.com Web: www.percival-scientific.com</p> <p>Weiss Gallenkemp Ltd Willowbank House, 84 Station Road Marlow, Buckinghamshire SL7 1NX United Kingdom Phone: (44) 1494 43 43 24 Fax: (44) 1494 43 43 Web: www.weissttechnik.co.uk</p> <p>Cole-Parmer Instruments Co. 625 East Bunker Court Vernon Hills, IL 60061-1844 USA Phone: (1) 847 549 7600 Fax: (1) 847 549 1700 Email: sales@coleparmer.com Web: www.coleparmer.com</p> <p>Fisher Scientific 2000 Park Land Dr. Pittsburg, PA 15275-9943 USA Phone : (1) 973 467 6511 Fax: (1) 800 926 1166 Web: www.fishersci.com</p> <p>Thomas Scientific P.O. Box 99 Swedesboro, NJ 08085 USA Phone: (1) 800 524 0018 Fax: (1) 856 467 3087 Email: global@thomassci.com Web: www.thomassci.com</p>
15	Magnifier lamp	Seed cleaning	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany, OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022, W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p>

18	Purity workboard	Seed cleaning	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany, OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road P.O. Box No. 42 Ambala Cantt. - 133 001 Haryana India Phone: (91) 171 2699347/2699267 Fax: (91) 171 2699222/2699102 Email: eenquiry@indosaw.com</p>
19	Sealing machine (aluminium foil bags/ Cans)	Constant heat machines that use thermostatic controllers to maintain the element bar at a selected temperature to seal laminated aluminium bags and other materials made from layers of plastic film having different properties and melting points	<p>Aluminium foil bags Audion Elektro BV P.O. Box 389 1380 AJ WEESP The Netherlands Phone: (31) 294 491717 Fax: (31) 294 491761 Email: holland@audion.nl Web: www.aud.com</p> <p>Hulme-Martin Tavak 317 Guildford Road Bisley Woking Surrey GU24 9BB UK Phone: (44) 1483 476767 Fax: (44) 1483 486343 Web: www.hulmemartin.co.uk</p> <p>Can sealer: Embarcadero Home Cannery 2026 Livingston Street Oakland, CA 94606 USA Phone: (1) 510 535 2311 Fax: (1) 510 535 2235 Email: contact_ehcan@hotmail.com Web: www.ehcan.com</p>

20	Seed blower	Seed cleaning – separation of light weight material from seeds	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany, OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road P.O. Box No. 42 Ambala Cantt. - 133 001 Haryana India Phone: (91) 171 2699347/2699267 Fax: (91) 171 2699222/2699102 Email: eenquiry@indosaw.com</p>
21	Seed counter	Counting a predetermined number of seeds or registering a count on a preweighed or volumetrically measured portion.	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road, P.O. Box No. 42 Ambala Cantt. - 133 001 Haryana India Phone: (91)171 2699347/2699267 Fax: (91)171 2699222/2699102 Email: eenquiry@indosaw.com</p>
22	Seed-counting boards	For counting and spacing large seeds in planting medium	<p>Hoffman Manufacturing Co. 353 29th Ave. S.W., P.O. Box 547 Albany, OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p>

23	Seed divider	To prepare representative samples from composite samples	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road, P.O. Box No. 42 Ambala Cantt. - 133 001 Haryana India Phone: (91)171 2699347/2699267 Fax: (91)171 2699222/2699102 Email: eenquiry@indosaw.com</p>
24	Shelving (mobile/static)	Mobile galvanised steel frame with PVC coating similar to library shelves preferable	<p>Crown Industrial 213 Michelle Court San Francisco, CA 94080 USA Phone: (1) 650 952 5150 Fax : (1) 650 873 1495 Email: autodor@crown-industrial.com Web: www.mobileshelving.net</p> <p>Montel 225, 4th Avenue, C.P 130 Montmagny, Québec G5V 3S5 Canada Fax: (1) 418 248 7266 Phone: (1) 877 935 0236 Email: system@montel.com Web: www.montel.com</p>

25	Sieves, graded	Seed cleaning and separation	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road, P.O. Box No. 42 Ambala Cantt. - 133 001 Haryana India Phone: (91)171 2699347/2699267 Fax: (91)171 2699222/2699102 Email: eenquiry@indosaw.com</p>
26	Stereo microscope	Seed quality and health assessment	<p>Cole-Parmer Instruments Co. 625 East Bunker Court Vernon Hills, IL 60061-1844 USA Phone: (1) 847 549 7600 Fax: (1) 847 549 1700 Email: sales@coleparmer.com Web: www.coleparmer.com</p> <p>Fisher Scientific 2000 Park Land Dr. Pittsburg, PA 15275-9943 USA Phone: (1) 973 467 6511 Fax: (1) 800 926 1166 Web: www.fishersci.com</p> <p>Osaw Industrial Products Pvt. Ltd. Osaw Complex, Jagadhri Road, P.O. Box No. 42 Ambala Cantt. - 133 001 Haryana India Phone: (91) 171 2699347/2699267 Fax: (91) 171 2699222/2699102 Email: eenquiry@indosaw.com</p> <p>Thomas Scientific P.O. Box 99 Swedesboro, NJ 08085 USA Phone: (1) 800 524 0018 Fax: (1) 856 467 3087 Email: global@thomassci.com Web: www.thomassci.com</p>

<p>b. Field (seed envelopes, pollination bags, labels, etc.)</p>		<p>A.P. Burt & Sons Severn Paper Mill Portishead Bristol BS20 7DJ UK Phone: (44) 1275 842454 Fax: (44) 1275 84 96 13</p> <p>PBS International Salter Road Scarborough YO11 3UZ UK Tel : (44) 1723 584091 Fax : (44) 1723 581664 Email : pbs@duraweld.co.uk Web : www.pbs.co.uk</p> <p>M/S Ajay Kumar & Co. C-149 Moti nagar New Delhi 100 015 India Tel : (91) 11 5100776 Fax : (91) 11 5441950</p> <p>Sigma-Aldrich Customer Service PO Box 14508 St. Louis, MO 63178 USA (See Web site for other countries) Phone: (1) 800 325 3010 Fax: (1) 800 325 5052 Web: www.sigmaaldrich.com</p> <p>Merck Chemicals Ltd. Boulevard Industrial Park Padge Road, Beeston Nottingham NG9 2JR UK Phone: (44) 115 9430840 Fax: (44) 115 9574237 Email: information@merckchem.co.uk</p>
<p>c. Chemicals (Tetrazolium chloride, Agar, desiccants, etc.)</p>		

29	Thermohygrometer, hygrothermograph	To monitor temperature and RH in clod rooms	<p>Cole-Parmer Instruments Co. 625 East Bunker Court Vernon Hills, IL 60061-1844 USA Phone: (1) 847 549 7600 Fax: (1) 847 5491700 Email: sales@coleparmer.com Web: www.coleparmer.com</p> <p>Fisher Scientific 2000 Park Land Dr. Pittsburg, PA 15275-9943 USA Phone : (1) 973 467 6511 Fax: (1) 800 926 1166 Web: www.fishersci.com</p> <p>Thomas Scientific P.O. Box 99 Swedesboro, NJ 08085 USA Phone: (1) 800 524 0018 Fax: (1) 856 467 3087 Email: global@thomassci.com Web: www.thomassci.com</p>
30	Thresher, mechanical	Designed for threshing single plants and heads of small cereal grain	<p>Hoffman Manufacturing Co. 353, 29th Ave. S.W. P.O. Box 547 Albany OR 97321 USA Phone: (1) 541 926 2920 Fax: (1) 541 926 3949 Email: info@hoffmanmfg.com Web: www.hoffmanmfg.com</p> <p>Seedburo Equipment Co. 1022 W. Jackson Blvd. Chicago, IL 60607 USA Phone: (1) 312 738 3700 Fax: (1) 312 738 5329 Email: sales@seedburo.com Web: www.seedburo.com</p>