

10	first true leaf emergence (can only use once)
9	coleoptile > 20mm
8	coleoptile length 10-20mm
7	coleoptile length 0-10mm
6	coleoptile emergence (can only use once)
5	radicle > 20mm
4	radicle 10-20mm
3	radicle 6-10mm
2	radicle 1-5mm long
1	first instance of radicle emergence (can only use once)
0	no radicle emergence

SA Levels/Codes	
Control =	C
Water =	W
0.5mM =	0.5mM
1 (low)	L
1.0mM =	1.0mM
H (high)	H

PI: Martyn
Project: SA Species

[illegible]

0	no radicle emergence
1	first instance of radicle emergence (can only use once)
2	radicle 1-5mm long
3	radicle 6-10mm
4	radicle 10-20mm
5	radicle >20mm
6	coleoptile emergence (can only use once)
7	coleoptile length 0-10mm
8	coleoptile length 10-20mm
9	coleoptile >20mm
10	first true leaf emergence (can only use once)

SA Levels/Codes	
Control =	C
Water =	W
0.5mM =	L (low)
1.0mM =	H (high)

7-2-2025

PI: Martyn
Project: SA Species

10	first true leaf emergence (can only use once)
9	coleoptile >20mm
8	coleoptile length 10-20mm
7	coleoptile length 0-10mm
6	coleoptile emergence (can only use once)
5	radicle >20mm
4	radicle 10-20mm
3	radicle 6-10mm
2	radicle 1-5mm long
1	first instance of radicle emergence (can only use once)
0	no radicle emergence

SA Levels/Codes	
Control =	C
Water =	W
Low L (low)	0.5mM =
High H (high)	1.0mM =

HN

SC-1-E

Temp range: 5-25°C

Species: POSE

PI: Martyn
Project: SA Species

HW

M

= 1.0mT

(48:4) H

(48:4) H

PI: Martyn
Project: SA Species

[illegible]

Name: M.H. PW
Date: 6-29-25

SA Levels/Codes
Control =
Water =

$$\begin{array}{lcl} \text{H} & & = 1.0 \text{ mM} \\ \text{L} & & = 0.5 \text{ mM} \end{array}$$

1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1

[illegible]

Notes:

- | | |
|----|---|
| 0 | no radicle emergence |
| 1 | first instance of radicle emergence (can only use once) |
| 2 | radicle 1-5mm long |
| 3 | radicle 6-10mm |
| 4 | radicle 10-20mm |
| 5 | radicle >20mm |
| 6 | coleoptile emergence (can only use once) |
| 7 | coleoptile length 0-10mm |
| 8 | coleoptile length 10-20mm |
| 9 | coleoptile >20mm |
| 10 | first true leaf emergence (can only use once) |

4008-10

0	no radicle emergence
1	first instance of radicle emergence (can only use once)
2	radicle 1-5mm long
3	radicle 6-10mm
4	radicle 10-20mm
5	radicle >20mm
6	coleoptile emergence (can only use once)
7	coleoptile length 0-10mm
8	coleoptile length 10-20mm
9	coleoptile >20mm
10	first true leaf emergence (can only use once)

SA Levels/Codes	
Control =	C
Water =	W
0.5mM =	L (low)
1.0mM =	H (high)

Species: POSE
Temp range: 5-25°C
Day/yr: 12

PI: Martyn
Project: SA Species

SA Levels/Codes
Control = C
Water = W

0.5mM = L (low)
1.0mM = H (high)

L (low)
H (high)

1	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
2	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
3	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
4	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
5	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
6	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
7	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
8	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
9	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
10	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
11	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
12	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
13	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL
14	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL	OL

Notes:

- 0 no radicle emergence
- 1 first instance of radicle emergence (can only use once)
- 2 radicle 1-5mm long
- 3 radicle 6-10mm
- 4 radicle 10-20mm
- 5 radicle >20mm
- 6 coleoptile emergence (can only use once)
- 7 coleoptile length 0-10mm
- 8 coleoptile length 10-20mm
- 9 coleoptile >20mm
- 10 first true leaf emergence (can only use once)

0	no radicle emergence
1	first instance of radicle emergence (can only use once)
2	radicle 1-5mm long
3	radicle 5-10mm
4	radicle 10-20mm
5	radicle >20mm
6	coleoptile emergence (can only use once)
7	coleoptile length 0-10mm
8	coleoptile length 10-20mm
9	coleoptile >20mm
10	first true leaf emergence (can only use once)

SA Levels/Codes	
Control =	C
Water =	W
0.5mM =	L (low)
1.0mM =	H (high)

Team MIT

52/52/9

0421

Species: POSE

PI: Martyn
Project: SA Species

~~2~~ ~~1~~

[illegible]

Name: Team
Date: 6/23/25

Name:

SA Levels/Codes

Control =

M
2
$$= 0.5 \text{ mm}$$
$$= 1.0 \text{ mT}$$

(MOI) 7

(48!4) H

Species: POSE
Temp range: 5-25oC
DayHr: 12

PI: Martyn
Project: SA Species

Date 16-28-25

SA Levels/Codes

Name MH

Control = C 0.5mM = L (low)
Water = W 1.0mM = H (high)

2 seeds, 10-15°C, 7-8°C

	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14
1	2C	2C	2C	2C	1C	2C	0W	1W	2C	2C	0W	0W	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
1	2C	2C	0W	0W	2C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
2	2H	0H	2C	2C	2H	0H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
2	0H	0H	0C	2C	2H	0H	1C	2C	0H	1H	2C	0C	2H	2H	2C	2C	2H	0H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
3	2C	2C	0C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
3	2C	2C	0C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
4	2H	0H	0C	0C	2H	2H	2C	2C	2H	0H	2C	2C	0H	2C	2C	2C	0H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
4	0H	0H	2C	2C	2H	2H	0C	2C	2H	2H	0C	2C	0H	2C	2C	2C	0H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
5	0C	0C	0C	0C	2C	0C	2C	2C	0C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
5	0C	2C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
6	2H	0H	0C	0C	0H	2H	2C	2C	0H	0H	2C	2C	0H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
6	2H	0H	0C	2C	0H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
7	2C	2C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
7	0C	2C	2C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
8	0H	0H	2C	1C	0H	0H	0C	2C	2H	2H	2C	2C	2H	2H	2C	2C	0H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
8	2H	2H	0C	2C	0H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
9	2C	2C	0C	2C	2C	2C	1C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
9	2C	0C	0C	2C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
10	0H	0H	2C	2C	0H	2H	2C	2C	0H	2H	2C	2C	2H	2H	2C	2C	0H	2H	2C	2C	0H	2H	2C	2C	2H	2H	2C	
10	0H	2H	0C	2H	2H	0C	2C	1H	2H	2C	2C	0H	2H	0C	2C	2H	0H	2C	2C	0H	2H	2C	2C	2H	2H	1C	2C	
11	0C	0C	0C	0C	0C	0C	0C	2C	1C	2C	2C	0C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
11	2C	0C	2C	1W	0C	2C	1C	0W	1C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	2C	
12	1H	0H	0C	0C	2H	0H	0C	0C	0H	2H	1C	2H	2C	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	2C	2H	2H	2C	
12	0H	0H	2C	0C	2H	0H	0C	0C	1H	2H	0C	0C	1H	2H	0C	2C	2H	0H	2C	2C	0H	2H	2C	2C	2H	2H	2C	
13	2C	2C	0C	1C	0C	1C	0C	2C	1C	0W	0W	0C	2C	0W	1W	0C	0C	0C	0C	1C	1C	2C	2C	1C	2C	2C	2C	
13	2C	2C	0C	1C	0C	1C	0C	2C	0C	1W	0W	2C	0C	0W	0W	2C	0C	0C	1W	2C	1C	2C	0W	2C	1C	2C	1W	
14	0H	0C	0H	2C	0C	1H	0H	0C	0C	0H	2C	1C	0H	2C	1C	1H	0H	2C	2C	1H	1H	2C	2C	1H	2H	2C	0C	
14	0H	0C	0H	2C	0C	1H	0H	1C	1C	0H	2C	1C	0H	2C	1C	1H	0H	2C	2C	1H	0H	2C	2C	1H	2H	2C	2C	

Notes:

- 0 no radicle emergence
- 1 first instance of radicle emergence (can only use once)
- 2 radicle 1-5mm long
- 3 radicle 6-10mm
- 4 radicle 10-20mm
- 5 radicle >20mm
- 6 coleoptile emergence (can only use once)
- 7 coleoptile length 0-10mm
- 8 coleoptile length 10-20mm
- 9 coleoptile >20mm
- 10 first true leaf emergence (can only use once)

0-30mm

Species: POSE
Temp range: 5-25oC
DayHr: 12

PI: Martyn
Project: SA Species

Date 2020-08-25

SA Levels/Codes

Control = C 0.5mM = L (low)
Water = 2 seeds planted → 1.0mM = H (high)

Name MH

	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14
1	2C	2C	2W	2W	1C	2C	0W	1W	2C	2C	0W	0W																
1	2C	2C	0W	0W	2C	2C	0W	2C	2C	2W	2W																	
2	2H	2H	2L	2L	2H	2H	2L	2L	2H	2H	2L	2L																
2	0H	0H	0L	0L	2H	0H	1L	2L	0H	1H	2L	0L																
3	2C	2C			2C	2C	2W	0W	2C	2C	2W	2C	2C	2W	2C	2C	0W	2W										
3	2C	2C	0W	0W	2C	2C	2W	2W	2C	2C	2W	2C	2C	2W	2C	2C	2W	2C										
4	2H	0H	0L	0L	2H	2H	2L	2L	2H	2H	2L	2L	2H	2H	2L	2L	2H	2L										
4	0H	0H	2L	1L	2H	2H	0L	2L	2H	2H	2L	2L	0H	2H	2L	2L	2H	2L										
5	0C	0C	0W	0W	2C	0C	2W	2W	0C	2C	0W	2W	2C	2C	2W	2C	0W	0W										
5	0C	2C	2W	0W	2C	2C	2W	2W	0C	2C	2W	2C	2C	2W	2C	2C	2W	2C										
6	2H	0H	0L	0L	0H	2H	2L	2L	0H	0H	2L	2L	0H	2H	2L	2L	2H	2L										
6	2H	0H	0L	2L	0H	2H	2L	2L	2H	2H	2L	2L	2H	2H	2L	2L	2H	2L										
7	2C	2C	2W	0W			2W	2W	2C	2C	0W	2W	0C	2C	2C	2W	2C	2W										
7	2C	2C	0W	2W	2C		0W	2W	2C	2C	2W	2C	2C	2W	2C	2C	2W	2C										
8	0H	0H	0L	1L	0H	0H	0L	2L	2H	2H	2L	2L	2H	2H	2L	2L	2H	2L										
8	2H	2H	0L	2L	0H	2H	2L	2L	2H	2H	2L	2L	2H	2H	2L	2L	2H	2L										
9	2C	2C			2C	2C	2W	1W	2C	2C	2W	2W	2C	2C	2W	2C	0W	2W										
9	2C	0C	0W		2C	0C	0W	2W	0C	2C	2W	2W	2C	2C	2W	2C	0W	2W										
10	0H	0H	2L	2L	0H	2H	2L	2L	0H	2H	2L	2L	2H	2H	2L	2L	2H	2L										
10	0H	2H	0L		2H	2H	0L	2L	1H	2H	2L	2L	2H	2H	2L	2L	2H	2L										
11	0C	0C	0W	0W	0C	0C	0W	0W	2C	1C	2W	2W	0C	2C	2W	2W	2C	2W										
11	2C	0C	2W	1W	0C	2C	1W	0W	1C	1C	2W	2W	2C	2C	2W	2C	0W	2W										
12	1H	0H	0L	0L	2H	0H	0L	0L	0H	2H	1L	2L	1H	2H	0L	2L												
12	0H	0H	2L	0L	2H	0H	0L	0L	1H	2H	0L	0L	1H	2H	0L	2L												
13																												
13																												
14																												
14																												

Notes:

- 0 no radicle emergence
- 1 first instance of radicle emergence (can only use once)
- 2 radicle 1-5mm long
- 3 radicle 6-10mm
- 4 radicle 10-20mm
- 5 radicle >20mm
- 6 coleoptile emergence (can only use once)
- 7 coleoptile length 0-10mm
- 8 coleoptile length 10-20mm
- 9 coleoptile >20mm
- 10 first true leaf emergence (can only use once)