

Screening of Soybean (*Glycine max* (L.) Merr.) Genotypes for Resistance to Rhizoctonia Aerial Blight Caused by *Rhizoctonia solani* under Nagaland Conditions

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Abstract

Soybean (*Glycine max* (L.) Merr.) is an important crop worldwide, but its productivity is constrained by Rhizoctonia aerial blight caused by *Rhizoctonia solani*. The present study evaluated 54 soybean genotypes, including three check varieties, for resistance to Rhizoctonia aerial blight under natural field conditions. None of the genotypes showed an immune response; however, genotypes exhibited resistant, moderately resistant, and moderately susceptible reactions. The mean per cent disease index (PDI) ranged from 1.66% to 28.96%, with the lowest PDI recorded in AMS 24-7 (1.66%) and the highest in SL 1442 (28.96%). Similarly, the area under the disease progress curve (AUDPC) was lowest in AMS 24-7 (20.81) and highest in SL 1442 (237.43). Disease severity showed a negative and highly significant correlation with minimum temperature and maximum relative humidity. These findings identify promising genotypes for resistance breeding.

Keywords: Area under the disease progress curve (AUDPC), *Rhizoctonia solani*, disease severity, *Rhizoctonia* aerial blight, soybean

INTRODUCTION

Soybean (*Glycine max* L. Merr.) is the most significant crops in the world. Soybean seeds are beneficial for both protein meal and vegetable oil. It originated from China, a member of the Papilionaceae subfamily of the Fabaceae family. It is among the most significant and ancient crops cultivated globally (Nainwal *et al.* 2020). It is a major source of animal protein feed and vegetable oil worldwide. It has the highest protein content (40–42%) of any crop and has the second-highest oil content (18–22%) among dietary legumes, behind peanuts (Hamza *et al.* 2024). In India, soybean serves as an oilseed crop, with domestic production estimated at 10.54 million tonnes for the 2025-2026 oil year (SOPA, 2026). Soybean is susceptible to a diverse range of pathogens such as fungi, bacteria, nematodes and viruses that can

significantly impact yield and seed quality throughout the growing season (Amrate *et al.* 2021).

Rhizoctonia Aerial Blight (RAB) often known as web blight, which is caused by *Rhizoctonia solani* Kuhn is one of the most economically significant diseases affecting soybean in India. It results in yield losses of 35–60% and under favourable environmental conditions might potentially reach a disastrous 80%. *R. solani* causes aerial blight in soybeans, which manifests as leaf and pod spots, leaf blight, defoliation, lesions on the stem and petiole, a mycelium that resembles a cob-web and sclerotia that develops on infected leaves (Bhamra *et al.* 2022). It is a prevalent soybean disease that occurs wherever soybeans are grown in the presence of the pathogenic agent. The most difficult issue is that most soybean genotypes are sensitive or moderately resistant to the disease and is critical to investigate effective management measures to

reduce the impact of *R. solani* and other diseases on soybean crops (Amrate *et al*, 2025). In view of the importance of RAB disease and the extent of damage, it creates a critical need for systematic screening and identification of resistant sources. To develop effective management strategies for sustainable soybean cultivation, the present study was conducted to evaluate soybean genotypes for their resistance to *Rhizoctonia* aerial blight under natural field conditions. Identified resistant genotypes could serve as valuable sources of resistance in soybean breeding programmes

MATERIALS AND METHODS

An experiment was carried out during the *kharif* season of 2025 to identify source of resistance against *Rhizoctonia* aerial blight (RAB) disease of soybean in the AICRP on Soybean research farm, School of Agricultural Sciences (SAS), Medziphema Campus, Nagaland University. Fifty four genotypes of soybean including three check varieties were screened to identify the source of resistance to RAB under natural field conditions. The experiment was conducted with two replications in a

randomized block design with a row-to-row distance of 45 cm and plant to plant distance of 5 cm. Disease identification was done based on the symptoms in the field as well as morphological characteristics. Disease Incidence was calculated by using the equation given by Magar (2015).

Disease Incidence (DI)

$$= \frac{\text{Number of diseased plants}}{\text{Total number of plants examined}} \times 100$$

Disease severity were recorded after initiation of disease at weekly interval on the basis of 0-9 rating scale given by Mayee and Datar (1986) and further converted into a percent disease index (PDI) using the formula given by Wheeler (1969):

Per cent Disease Index(PDI)

$$= \frac{\text{Sum of individual disease rating}}{\text{Number of plant assessed} \times \text{Maximum rating}} \times 100$$

The reactions of soybean genotypes were categorized into different categories based on the PDI as per AICRP (2018).

Rhizoctonia Aerial Blight disease rating scale, Mayee and Datar (1986)

Scale	Description
0	No lesions/spots.
1	1% leaf area covered with lesions/spots.
3	1.1-10% leaf area covered with lesions/spots, no spots on stem.
5	10.1–25% of the leaf area covered; no defoliation; little damage.
7	25.1–50% leaf area covered; some leaves drop; death of a few plants; damage conspicuous.
9	More than 50% area covered, lesions/spot very common on all plants, defoliation common; death of plants common; damage more than 50%.

Reactions of soybean genotypes to *Rhizoctonia* aerial blight infection (AICRP, 2018)

Percent Disease Index (PDI)	Categories
0%	No infection/immune (I)
0-10%	Resistance response (R)
10.1–20%	Moderately resistant (MR)
20.1–30%	Moderately susceptible (MS)
30.1–50%	Susceptible (S)
> 50%	Highly susceptible (HS).

Area under disease progress curve (AUDPC) was calculated as per formula given by Wilcoxson *et al.* (1975)

$$\text{AUDPC} = \sum_{i=1}^k \frac{1}{2} (S_i + S_{i+1}) \times d$$

Where, A = Area under disease progress curve, k = Number of successive evaluations of disease, S_i = Disease incidence at the end of the week, and d = Interval between two evaluations.

The data obtained from all the observation were compiled and statistically analysed in MS Excel by using statistical method for Randomized Block Design (RBD) with 5% and 1% level of significance described by Gomez and Gomez (1984), while Karl Pearson's correlation coefficient was used to calculate the correlation.

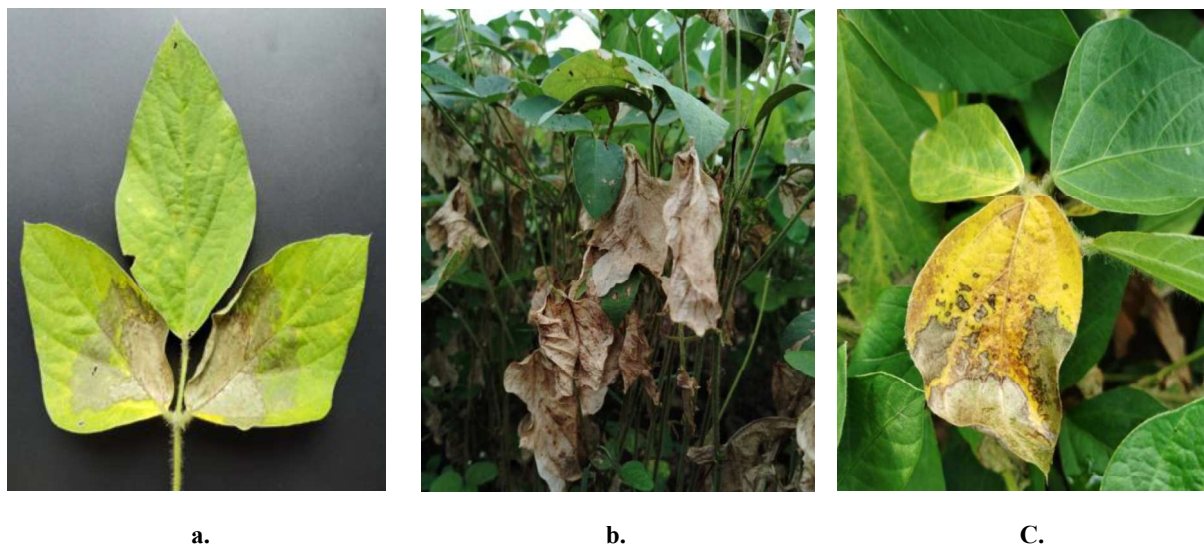


Fig. 1. Symptoms of *Rhizoctonia* aerial blight

(a.) Water soaked lesions (b.) Blighted appearance of the plant (c.) Cobweb-like mycelium

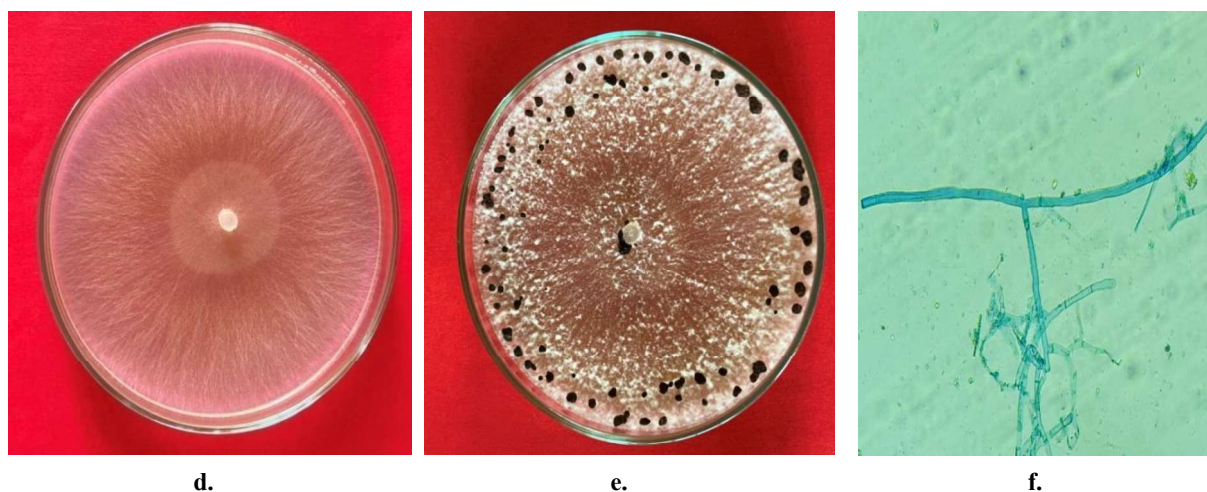


Fig.2. Morphological characters of *Rhizoctonia solani*.

(d.) Culture (e.) Sclerotia (f.) Right angle branching of hyphae with constriction at the point of branching

RESULTS AND DISCUSSION

Symptomatology

The symptoms of RAB initially appeared on the lower leaves and petioles near the soil surface. Initial symptom was seen on the leaves and infection was observed to begin from the lower or middle parts of the plant. It gradually infected the upper parts of the plant which caused rapid defoliation. Small water-soaked lesions were observed on the leaves which later coalesced and covered large areas of the leaf that turned tan to brown at maturity (Figure 1). Leaf and pod spots, leaf blight, defoliation, stem and petiole lesion, cobweb-like mycelium was observed on the field. The infected leaves adhered to the neighbouring leaves due to abundant fungal growth due to which it gave a blighted and brown appearance. Several authors had documented the symptoms of *Rhizoctonia* aerial blight disease as similar to the present study, published earlier by Atkins and Lewis (1954), Bhamra *et al.* (2022) and Amrate *et al.* (2025).

Morphological characterization

The colony observed was initially white which later turned to light brown in colour as they matured on PDA and the colony texture was fluffy. The sclerotia produced were small, circular and irregularly shaped, initially white which on maturity changed from light to dark brown in colour. Under microscopic observation, hyphal branching at right angle and constriction at the origin of branching was observed (Figure 2).

The present research findings are in accordance with Aydin (2022); Chaudhary *et al.* (2023); Rodriguez-Herrera *et al.* (2023) and Lal *et al.* (2024) who demonstrated that the isolates of *R. solani* have brown hyphae that branched at right angle with a little constriction at the origin of the branching site. Similar findings were reported by Rahman *et al.* (2020) and Yuvaraj *et al.* (2025) who observed that the colony growth was fluffy in texture and brown in colour.

Screening of soybean genotypes against *Rhizoctonia* aerial blight

Screening of 54 soybean genotypes against *Rhizoctonia* aerial blight was recorded during 30th August 2025 to 11th October 2025 at weekly interval. After thorough investigation, the results showed that none of the

genotypes were immune, susceptible or highly susceptible against aerial blight disease as depicted in Table 1. Out of 54 genotypes, 11 genotypes namely RCS 1-13, AMS 24-7, DS 1881, JS 21-72, RCS 1-10, NRC 302, Hardee, RVS 23-12, RSC12-22, MACS1897, SL 958(RC) showed resistance response, 28 genotypes *viz.*, P.Sipani1052, AUKS23-101, VLS 110, NRC 300, DS 1955, Loksoya06, RSC 12-32, DSb 45, NRC 301, PS 1726, RVS 23-14, SL 1443, MAUS 821, RSb 231, KBSL-25, DSb 44, PS 1708, Loksoya 07, MAUS 785, NRC 304, VLS 109, AUKS23-14, NRC 142, TS 105, JS 30-11, NRC 149(RC), JS 93-05 and JS 20-116 showed moderately resistant while other 15 genotypes *viz.*, TS 25-3, JS 30-12, AMS 22-7, Asb263, MACS1868, Himso1698, NRC 303, BAUS-126, KDSIS 1401, Himso1699, AS 84, SL 1442, CAUMS 5, KDS753(RC) and JS 335 showed moderately susceptible reaction against RAB disease.

Similar investigations have been carried by other researchers as well. Amrate *et al.* (2020) has reported that out of sixty genotypes, five check varieties and sixteen genotypes were found to be resistant and moderately resistant but none showed immune or highly susceptible. Singh *et al.* (2019) determined that among the sixteen genotypes, none were absolutely resistant and highly susceptible and the genotype JS 335 was found to be moderately susceptible which was also similar with the findings of Amrate *et al.* (2023).

The highest mean disease incidence was observed in genotype SL 1442 (37.50%) which is at par with NRC 304 with 31.50% and CAUMS 5 with 27.00% and the lowest mean incidence of 3.00 % was observed in RVS 23-12. The maximum mean disease severity was observed in SL 1442 (28.96%) statistically at par with BAUS-126 (28.24%), Asb 263 (28.13%) while the minimum mean disease severity was observed in AMS 24-7 (1.66%). The highest AUDPC mean was recorded in SL 1442 (237.43) which is at par with BAUS-126 (228.53) and Asb 263 (221.61) and the lowest AUDPC was observed in AMS 24-7 (20.81).

The results are in conformity with the findings of Amrate *et al.* (2020) who reported that the disease index ranged from 0.75 to 37.50 per cent. The soybean genotypes were categorized into different categories based on the PDI values and found that JS 93-05 showed the least disease severity. Borah (2019) reported RAB at vegetative growth of soybean crop and observations were taken during *Kharif* of 2018, where PDI ranged from 30 – 40%.

Amrate *et al.* (2021) reported that the severity of aerial blight varied by genotype in 2017, 2018 and 2019 (0.0-21.8, 0.0-42.3 and 0.0-46.8 per cent respectively). It was found that aerial blight affected both JSS and JS 97-52

varieties from flowering to maturity and its severity increases with crop age which is also similar with the findings of Amrate (2024).

Table 1: Disease reaction of soybean genotypes against *Rhizoctonia* aerial blight based on mean value of disease incidence, PDI and AUDPC

Sl. No.	GENOTYPES	DISEASE INCIDENCE (%)	PDI (%)	AUDPC	DISEASE REACTION
1	P.Sipani1052	8.50	10.70	112.44	MR
2	AUKS23-101	8.50	15.23	158.27	MR
3	VLS 110	18.50	19.51	176.62	MR
4	TS 25-3	20.00	25.07	195.77	MS
5	NRC 300	15.00	18.24	166.62	MR
6	DS 1955	10.00	14.04	142.43	MR
7	JS 30-12	28.00	27.61	209.86	MS
8	AMS 22-7	26.50	28.01	215.76	MS
9	Loksoya06	9.00	17.05	163.31	MR
10	RSC 12-32	8.50	18.30	172.44	MR
11	Asb 263	18.50	28.13	221.61	MS
12	DSb 45	15.00	13.48	137.44	MR
13	MACS1868	15.50	22.85	193.27	MS
14	RCS 1-13	14.00	7.45	94.96	R
15	NRC 301	10.00	10.31	109.96	MR
16	PS 1726	16.50	18.07	166.60	MR
17	RVS 23-14	10.50	13.48	131.60	MR
18	Himso1698	15.00	25.55	204.93	MS
19	NRC 303	21.50	21.58	193.27	MS
20	SL 1443	14.00	19.51	175.08	MR
21	BAUS-126	17.50	28.24	228.53	MS
22	AMS 24-7	3.50	1.66	20.81	R
23	KDSIS 1401	22.50	21.02	193.26	MS
24	DS 1881	4.00	4.04	66.63	R
25	Himso1699	17.50	20.94	191.59	MS
26	JS 21-72	15.00	7.45	84.12	R
27	MAUS 821	28.50	19.52	179.95	MR
28	RSb 231	10.50	10.79	112.45	MR
29	RCS 1-10	3.50	2.69	34.96	R
30	NRC 302	8.50	9.89	109.93	R
31	Hardee	6.50	7.37	79.12	R
32	RVS 23-12	3.00	6.26	74.13	R
33	KBSL-25	17.00	12.06	123.28	MR

Sl. No.	GENOTYPES	DISEASE INCIDENCE (%)	PDI (%)	AUDPC	DISEASE REACTION
34	AS 84	15.00	20.70	185.78	MS
35	DSb 44	12.50	14.28	143.18	MR
36	SL 1442	37.50	28.96	237.43	MS
37	PS 1708	14.50	15.31	158.28	MR
38	CAUMS 5	27.00	21.97	193.27	MS
39	Loksoya 07	13.00	13.09	124.96	MR
40	MAUS 785	23.00	14.52	146.61	MR
41	NRC 304	31.50	17.37	165.77	MR
42	VLS 109	25.00	18.25	167.44	MR
43	AUKS23-14	21.00	13.25	127.44	MR
44	NRC 142	11.00	17.93	166.60	MR
45	TS 105	22.50	10.94	117.48	MR
46	RSC12-22	8.00	8.88	99.94	R
47	MACS1897	9.00	6.90	78.32	R
48	JS 30-11	13.50	11.10	119.07	MR
49	KDS753(RC)	20.00	23.80	194.13	MS
50	NRC 149(RC)	15.50	15.15	156.63	MR
51	SL 958(RC)	9.00	5.15	67.44	R
52	JS 335	7.72	16.72	163.30	MR
53	JS 93-05	9.77	15.79	159.94	MR
54	JS 20-116	13.50	16.66	160.79	MR
SEm±		4.41	2.84	26.53	
CD (P=0.05)		12.52	8.07	75.26	

R = Resistant; MR = Moderately resistant; MS = Moderately susceptible

Epidemiology studies

For epidemiological purposes, a basic correlation and regression study was conducted between disease severity and weather parameters from August to October 2025. Disease occurrence and intensity were noted under the following climatic conditions, Temperature: 23 to 33.9 °C, Relative Humidity: 70 to 94, Rainfall: 35.4 – 208.9 mm, Number of rainy days: 2-5 in Medziphema, Nagaland (Table 2). The analysed correlation data between weather variables and Rhizoctonia aerial blight disease severity of different genotypes (Table 3) revealed that most of the soybean genotypes showed highly significant negative correlation with T_{min} highest in JS 30-12 ($r = -0.917$) followed by VLS 110 ($r = -0.913$) and MACS 1868 ($r = -0.901$). This imparted that disease severity increases due to the decrease in minimum

temperature while highly significant negative correlation for RH_{max} was observed in TS 105 ($r = -0.875$). The correlations with T_{max} , RH_{min} , amount of rainfall and number of rainy days were comparatively weaker. The strong negative associations observed with T_{min} and RH_{max} indicated that the genotypes were highly sensitive to cooler night temperatures and disease decreased when RH was lower. Thus, decrease in temperature and prolonged periods of high humidity >85% during the study period was found to favour disease development. According to the coefficient of standard error (SE) value and determination (R^2), it was found that T_{min} and RH_{min} with SE value of 4.179 and 1.075 accounts for about 76.6% and 59.2% of the variability in disease severity (Table 4). The other parameters T_{max} , RH_{min} , amount of rainfall and number of rainy days had no significant

relationship with aerial blight severity.

SMW	Temperature (°C)		Relative humidity (%)		Rainfall (mm)	No. of rainy days
	Max	Min	Max	Min		
Week 35	32.7	24.5	94	74	105.6	5
Week 36	33.7	24.2	91	70	83.0	2
Week 37	31.7	24.3	93	80	208.9	5
Week 38	33.0	24.0	90	70	35.4	2
Week 39	33.9	24.2	86	71	38.0	2
Week 40	33.6	23.5	89	71	55.3	4
Week 41	31.8	23.0	89	77	84.4	5

Table 2: Meteorological data during the present study August to October 2025

Source: Weather data at ICAR RC – NEH Region, Nagaland Centre, Jharnapani, Medziphema – 797106

Table 3: Correlation coefficient (r) on per cent disease index of different soybean genotypes caused by RAB with weather parameters during August to October 2025

Genotypes	Temperature		Relative humidity		Rainfall	No. of rainy days
	Max	Min	Max	Min		
V ₁ P.Sipani1052	-0.041	-0.894**	-0.710	0.025	-0.433	0.147
V ₂ AUKS23-101	-0.051	-0.886**	-0.760*	0.024	-0.410	0.046
V ₃ VLS 110	-0.054	-0.913**	-0.738	0.024	-0.413	0.076
V ₄ TS 25-3	0.023	-0.830*	-0.808*	-0.051	-0.436	-0.089
V ₅ NRC 300	0.038	-0.898**	-0.676	-0.054	-0.449	0.138
V ₆ DS 1955	-0.043	-0.880**	-0.735	0.042	-0.415	0.127
V ₇ JS 30-12	-0.066	-0.917**	-0.740	0.028	-0.398	0.044
V ₈ MS 22-7	-0.007	-0.888**	-0.757*	-0.039	-0.446	0.001
V ₉ Loksoya06	-0.133	-0.890**	-0.718	0.121	-0.343	0.136
V ₁₀ RSC 12-32	-0.088	-0.860*	-0.718	0.124	-0.294	0.152
V ₁₁ Asb 263	0.031	-0.876**	-0.785*	-0.050	-0.471	0.015
V ₁₂ DSb 45	-0.105	-0.895**	-0.721	0.079	-0.382	0.126
V ₁₃ MACS1868	-0.017	-0.901**	-0.735	0.008	-0.420	0.101
V ₁₄ RCS 1-13	0.051	-0.854*	-0.746	-0.033	-0.465	0.111
V ₁₅ NRC 301	-0.084	-0.903**	-0.644	0.088	-0.359	0.233
V ₁₆ PS 1726	0.041	-0.861*	-0.791*	-0.055	-0.447	-0.024
V ₁₇ RVS 23-14	-0.008	-0.887**	-0.711	0.020	-0.408	0.154
V ₁₈ Himso1698	0.030	-0.876**	-0.772*	-0.026	-0.418	0.026
V ₁₉ NRC 303	-0.007	-0.863*	-0.779*	-0.031	-0.460	0.006
V ₂₀ SL 1443	-0.100	-0.797*	-0.755*	0.094	-0.320	0.025
V ₂₁ BAUS-126	-0.015	-0.881**	-0.760*	0.007	-0.409	0.055
V ₂₂ AMS 24-7	-0.027	-0.836*	-0.783*	0.000	-0.464	0.040

Genotypes	Temperature		Relative humidity		Rainfall	No. of rainy days
	Max	Min	Max	Min		
V ₂₃ KDSIS 1401	-0.026	-0.848*	-0.778*	0.026	-0.400	0.043
V ₂₄ DS 1881	-0.139	-0.849*	-0.731	0.091	-0.385	0.085
V ₂₅ Himso1699	0.086	-0.825*	-0.830*	-0.107	-0.491	-0.103
V ₂₆ JS 21-72	0.001	-0.829*	-0.794*	0.017	-0.404	0.035
V ₂₇ MAUS 821	-0.028	-0.852*	-0.753	0.017	-0.403	0.064
V ₂₈ RSb 231	-0.108	-0.885**	-0.745	0.068	-0.368	0.038
V ₂₉ RCS 1-10	-0.138	-0.837*	-0.716	0.171	-0.290	0.183
V ₃₀ NRC 302	-0.111	-0.841*	-0.744	0.109	-0.358	0.118
V ₃₁ Hardee	-0.186	-0.882**	-0.688	0.152	-0.336	0.168
V ₃₂ RVS 23-12	0.029	-0.740	-0.813*	-0.071	-0.461	-0.133
V ₃₃ KBSL-25	-0.038	-0.850*	-0.757*	0.030	-0.378	0.042
V ₃₄ AS 84	0.087	-0.786*	-0.807*	-0.100	-0.504	-0.037
V ₃₅ DSb 44	0.017	-0.889**	-0.756*	-0.072	-0.518	0.036
V ₃₆ SL 1442	-0.026	-0.884**	-0.753	-0.002	-0.380	-0.020
V ₃₇ PS 1708	-0.036	-0.862*	-0.772*	0.034	-0.409	0.068
V ₃₈ CAUMS 5	-0.029	-0.869*	-0.771*	0.045	-0.375	0.064
V ₃₉ Loksoya 07	-0.024	-0.876**	-0.788*	-0.034	-0.470	-0.038
V ₄₀ MAUS 785	0.044	-0.890**	-0.770*	-0.075	-0.496	0.024
V ₄₁ NRC 304	-0.037	-0.870*	-0.780*	0.033	-0.397	0.037
V ₄₂ VLS 109	-0.025	-0.861*	-0.773*	-0.010	-0.467	0.044
V ₄₃ AUKS23-14	-0.130	-0.880**	-0.733	0.089	-0.385	0.091
V ₄₄ NRC 142	-0.047	-0.867*	-0.756*	0.038	-0.398	0.078
V ₄₅ TS 105	0.151	-0.766*	0.875**	-0.112	-0.439	-0.191
V ₄₆ RSC12-22	-0.028	-0.848*	-0.790*	-0.008	-0.415	-0.052
V ₄₇ MACS1897	-0.046	-0.839*	-0.762*	0.047	-0.404	0.092
V ₄₈ JS 30-11	-0.031	-0.773*	-0.760*	0.042	-0.360	0.038
V ₄₉ KDS753(RC)	0.040	-0.795*	-0.822*	-0.039	-0.432	-0.066
V ₅₀ NRC 149(RC)	-0.048	-0.863*	-0.765*	0.026	-0.428	0.065
V ₅₁ SL 958(RC)	-0.023	-0.829*	-0.784*	-0.034	-0.497	-0.002
V ₅₂ JS 335 (check)	0.029	-0.844*	-0.788*	-0.019	-0.419	0.016
V ₅₃ JS 93-05 (check)	0.009	-0.875**	-0.764*	0.003	-0.399	0.056
V ₅₄ JS20-116 (check)	-0.031	-0.773*	-0.760	-0.042	-0.360	-0.038

Note: df = (7-2) = 5

$r_{0.05} = 0.754$

$r_{0.01} = 0.875$

*, ** = Significant at 5% and 1% level of significance respectively

Values without a significance symbol are non-significant at the 5% level of significance ($P > 0.05$).

Table 4: Simple regression between disease severity of RAB and weather parameters

Simple regression	Regression equation	SE(b)	R ²
Maximum temperature (°C)	$y = -0.001x + 32.94$	5.048	0.000
Minimum temperature (°C)	$y = -0.045x + 24.65$	4.179	0.765
Maximum relative humidity (%)	$y = -0.204x + 93.41$	1.075	0.592
Minimum relative humidity (%)	$y = 0.002x + 73.24$	1.160	0.000
Rainfall (mm)	$y = -2.496x + 125.40$	0.069	0.180
Number of rainy days	$y = 0.007x + 3.46$	2.993	0.002

Note: y = Disease severity

x = Weather parameters

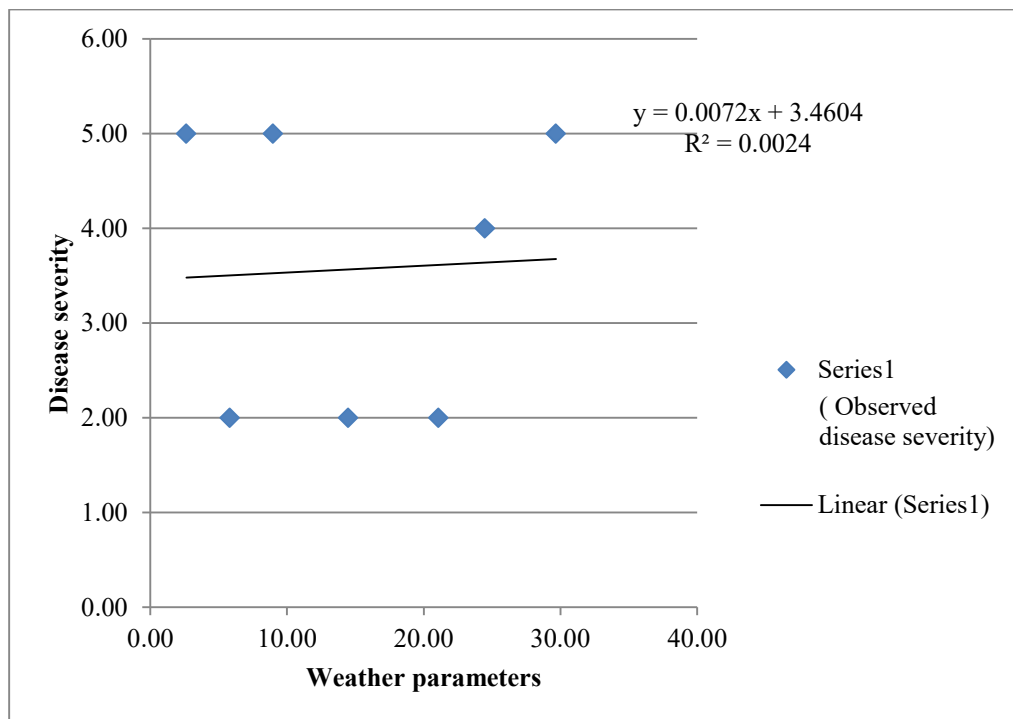


Fig 3. Regression line for Rhizoctonia aerial blight of soybean

The present findings are in support based on the research of earlier workers viz., Jeena *et al.* (2023) observed that maximum temperature, number of rainy days and evaporation exhibited non-significant correlation with the disease index. Nainwal *et al.* (2020) also reported that September and October were the most favorable months for disease development under natural field conditions.

They also observed that disease increased from 37th SMW to 42nd SMW. Surbhi and Singh (2020) also reported a negative correlation of T_{max} , T_{min} , relative humidity and rainfall with the development of disease which is also similar with the findings reported by Nainwal *et al.* (2021).

CONCLUSION

From the results recorded, it is evident that there was high variation in the disease severity of *Rhizoctonia* aerial blight among the soybean genotypes, which increased with time and the age of the crop. Out of 54 soybean genotypes screened, none were immune, susceptible or highly susceptible against aerial blight disease. The highest disease severity was observed in SL 1442 and lowest was observed in AMS 24-7, RCS 1-10 and DS 1881. This study also indicated that the severity of *Rhizoctonia* aerial blight (RAB) was influenced by the prevailing weather conditions, particularly minimum temperature and relative humidity, under Nagaland conditions. These findings may be useful in predicting and preventing the disease in the region through the timely adoption of appropriate management practices.

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