

## Morphological characterisation of rice accessions of semi deep water ecology

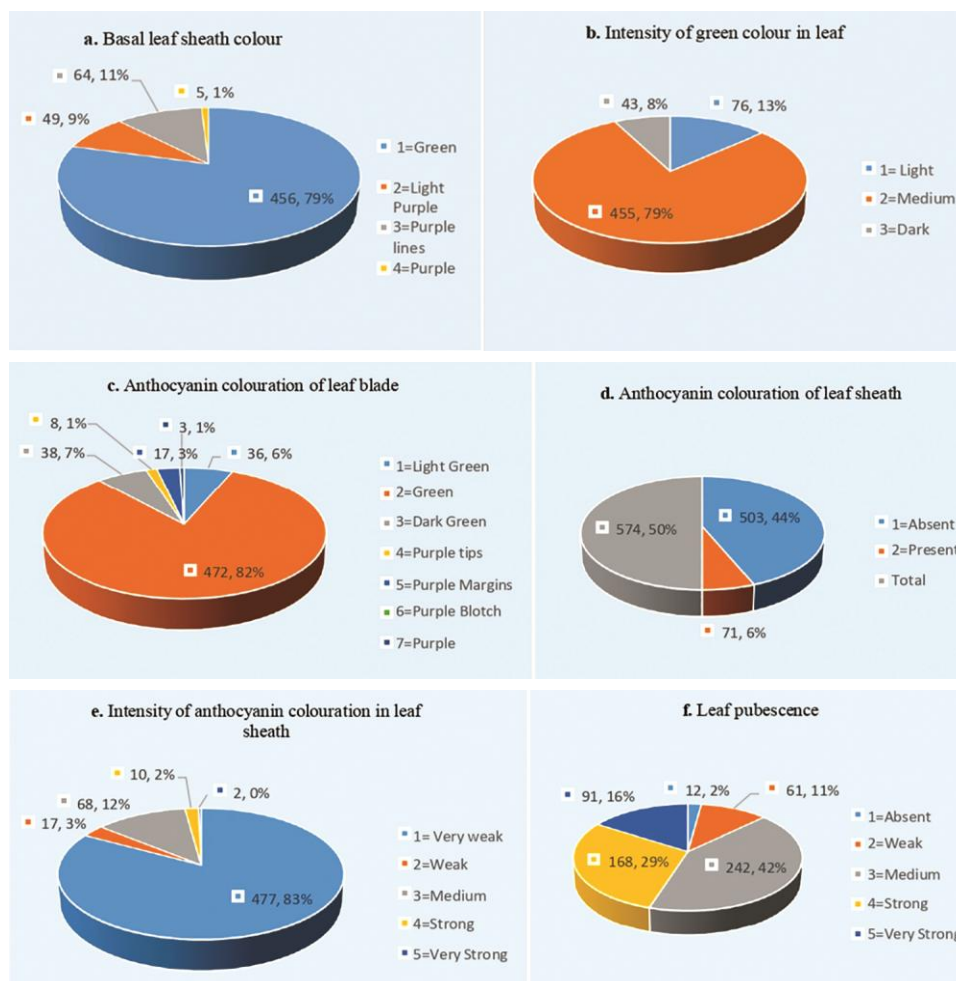
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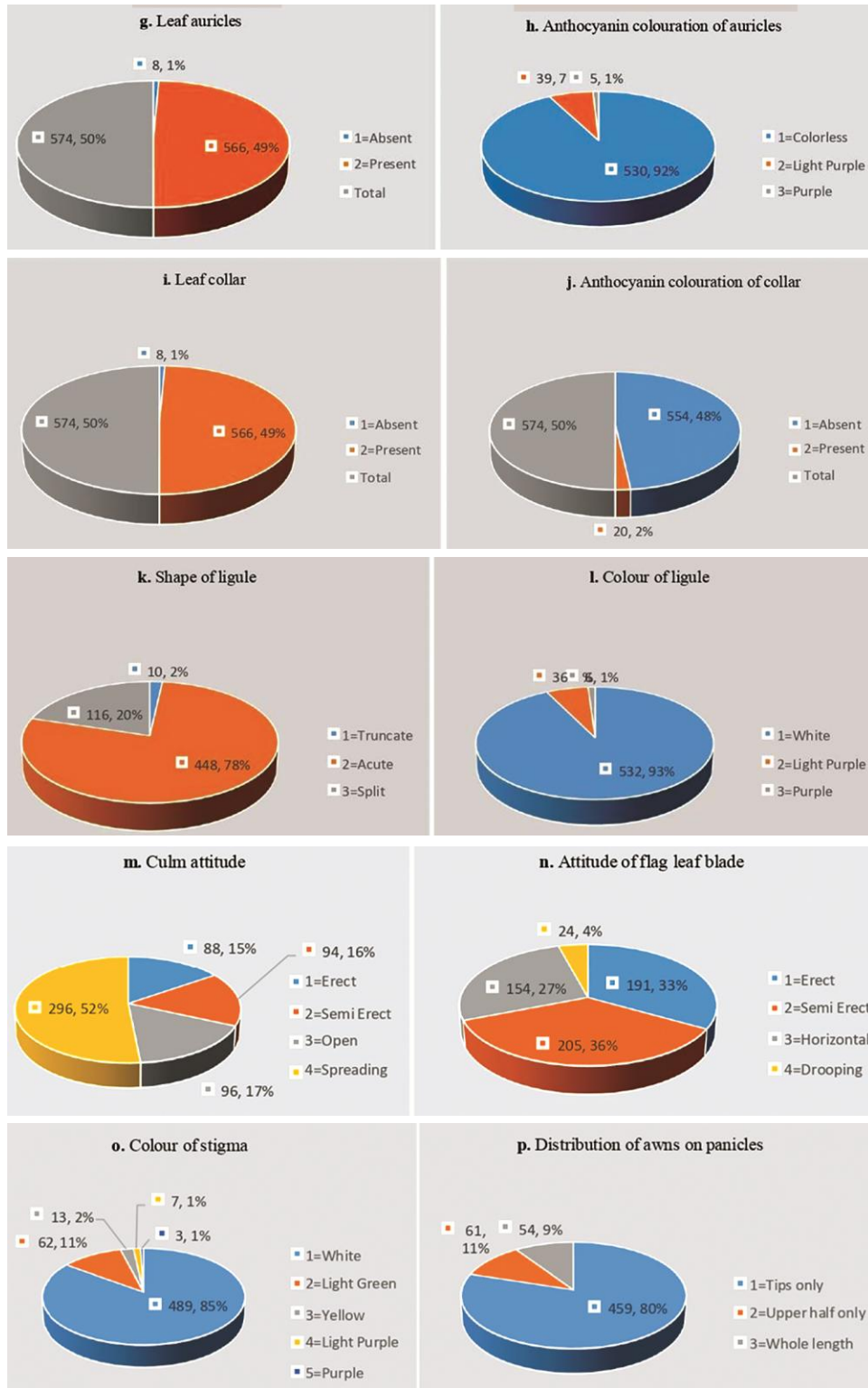
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Received 04 January 2022; revised 20 May 2022; accepted 18 July 2022





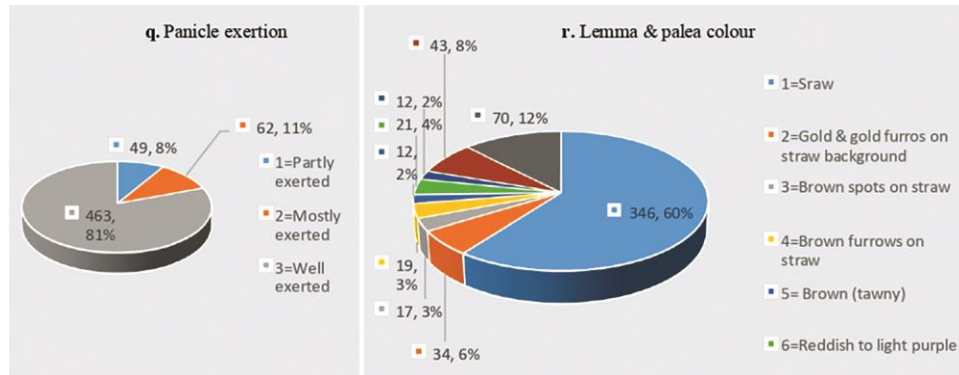


Fig. 1 — (a-r) Frequency distribution of 18 qualitative traits in 569 *asra* germplasm

Table 1 — Details of 569 *asra* rice accessions along with 5 checks

Sl. No.	Place of collection	Grain type	Kernel colour	Type of germplasm
1	Karimganj	M	White	Landrace
2	Karimganj	ML	White	Landrace
3	Karimganj	B	Red	Landrace
4	Karimganj	M	Red	Landrace
5	Hobiganj	B	Red	Landrace
6	Karimganj	M	Red	Landrace
7	North Sylhet	ML	Red	Landrace
8	Silchar	B	White	Landrace
9	Silchar	M	White	Landrace
10	Hailakandi	M	White	Landrace
11	Hailakandi	B	Red	Landrace
12	Hailakandi	M	White	Landrace
13	Silchar	B	White	Landrace
14	Silchar	B	White	Landrace
15	Hobiganj	B	Red	Landrace
16	Hobiganj	B	Amber	Landrace
17	Hobiganj	B	Red	Landrace
18	Hobiganj	ML	Red	Landrace
19	Hobiganj	B	Red	Landrace
20	Karimganj	M	Red	Landrace
21	Karimganj	M	Red	Landrace
22	North Sylhet	ML	White	Landrace
23	North Sylhet	M	White	Landrace
24	North Sylhet	M	White	Landrace
25	North Sylhet	M	White	Landrace
26	North Sylhet	B	Red	Landrace
27	North Sylhet	ML	White	Landrace
28	Karimganj	M	Red	Landrace
29	Karimganj	M	White	Landrace
30	Karimganj	M	Red	Landrace
31	Karimganj	M	Red	Landrace
32	Karimganj	M	White	Landrace
33	Karimganj	M	White	Landrace
34	North Sylhet	M	White	Landrace

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35	North Sylhet	M	Red	Landrace
36	North Sylhet	M	White	Landrace
37	South Sylhet	M	Amber	Landrace
38	Karimganj	B	White	Landrace
39	Karimganj	B	White	Landrace
40	Karimganj	M	White	Landrace
41	Silchar	B	White	Landrace
42	Silchar	B	White	Landrace
43	Silchar	ML	White	Landrace
44	Silchar	MF	White	Landrace
45	Silchar	M	White	Landrace
46	Hobiganj	M	Red	Landrace
47	Hobiganj	B	Red	Landrace
48	Hobiganj	B	Red	Landrace
49	Hobiganj	B	White	Landrace
50	Dacca	B	Red	Landrace
51	Dacca	B	Red	Landrace
52	Dacca	B	Red	Landrace
53	Hailakandi	M	White	Landrace
54	Hailakandi	B	White	Landrace
55	Hailakandi	M	White	Landrace
56	Hobiganj	B	Red	Landrace
57	Hobiganj	M	Red	Landrace
58	Hobiganj	B	Red	Landrace
59	Hobiganj	B	Red	Landrace
60	Hobiganj	B	Red	Landrace
61	Hobiganj	B	Red	Landrace
62	Hobiganj	M	White	Landrace
63	Hobiganj	B	Amber	Landrace
64	Hobiganj	B	Amber	Landrace
65	Hobiganj	L	White	Landrace
66	SouthSylhet	B	White	Landrace
67	Hobiganj	ML	White	Landrace
68	Hobiganj	B	Red	Landrace
69	Hobiganj	B	Red	Landrace
70	Hobiganj	B	Red	Landrace
71	Hobiganj	B	Red	Landrace
72	Sree Mongal	B	Red	Landrace
73	Sree Mongal	B	Red	Landrace
74	Harinagar	B	Red	Landrace
75	North Sylhet	M	White	Landrace
76	North Sylhet	B	White	Landrace
77	North Sylhet	M	White	Landrace
78	North Sylhet	B	White	Landrace
79	North Sylhet	M	Red	Landrace
80	Karimganj	M	Red	Landrace
81	Karimganj	M	White	Landrace
82	Karimganj	M	White	Landrace
83	Karimganj	B	White	Landrace
84	Karimganj	B	White	Landrace
85	Karimganj	M	White	Landrace

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86	Karimganj	M	Red	Landrace
87	Karimganj	B	White	Landrace
88	Karimganj	M	White	Landrace
89	Karimganj	M	White	Landrace
90	Hobiganj	B	White	Landrace
91	Hobiganj	B	Red	Landrace
92	Hobiganj	B	Red	Landrace
93	Hobiganj	M	Red	Landrace
94	Hobiganj	B	Amber	Landrace
95	Hobiganj	M	Amber	Landrace
96	Hobiganj	B	White	Landrace
97	Hobiganj	M	White	Landrace
98	Hobiganj	M	Red	Landrace
99	Hobiganj	ML	White	Landrace
100	Hobiganj	M	Red	Landrace
101	Hobiganj	M	White	Landrace
102	Silchar	M	White	Landrace
103	Sunamganj	B	Red	Landrace
104	Sunamganj	M	White	Landrace
105	Sunamganj	M	White	Landrace
106	Sunamganj	B	White	Landrace
107	Sunamganj	M	Red	Landrace
108	Sunamganj	M	Red	Landrace
109	Sunamganj	M	Red	Landrace
110	Sunamganj	M	Red	Landrace
111	Sunamganj	M	Red	Landrace
112	Sunamganj	M	Red	Landrace
113	Sunamganj	M	Red	Landrace
114	Sunamganj	B	White	Landrace
115	Sunamganj	M	White	Landrace
116	Sunamganj	B	White	Landrace
117	Sunamganj	M	Red	Landrace
118	Hailakandi	M	Red	Landrace
119	Hailakandi	M	White	Landrace
120	Hailakandi	M	White	Landrace
121	Hailakandi	M	Amber	Landrace
122	Hailakandi	M	White	Landrace
123	South Sylhet	B	White	Landrace
124	South Sylhet	B	Red	Landrace
125	Karimganj	B	Amber	Landrace
126	Hobiganj	M	Red	Landrace
127	Katigora	M	Red	Landrace
128	Hobiganj	B	Red	Landrace
129	Hobiganj	B	White	Landrace
130	Karimganj	M	Red	Landrace
131	Shaishganj	M	Red	Landrace
132	Sheola	M	White	Landrace
133	Sheola	ML	Red	Landrace
134	Sheola	M	White	Landrace
135	Kulaura	ML	White	Landrace
136	Kulaura	M	White	Landrace

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137	Kulaura	M	White	Landrace
138	Kulaura	M	Red	Landrace
139	Kulaura	B	Amber	Landrace
140	Kulaura	M	Red	Landrace
141	Kulaura	B	Amber	Landrace
142	North Sylhet	M	White	Landrace
143	North Sylhet	M	Red	Landrace
144	North Sylhet	M	White	Landrace
145	North Sylhet	M	White	Landrace
146	North Sylhet	M	White	Landrace
147	North Sylhet	M	Amber	Landrace
148	North Sylhet	ML	White	Landrace
149	North Sylhet	M	White	Landrace
150	North Sylhet	L	Amber	Landrace
151	North Sylhet	B	White	Landrace
152	North Sylhet	M	Amber	Landrace
153	Karimganj	M	Red	Landrace
154	Karimganj	M	Amber	Landrace
155	Karimganj	M	White	Landrace
156	Hailakandi	M	White	Landrace
157	Hailakandi	ML	White	Landrace
158	Hailakandi	M	Red	Landrace
159	Karimganj	ML	Red	Landrace
160	Karimganj	M	White	Landrace
161	Karimganj	B	White	Germplasm
162	Karimganj	ML	White	Germplasm
163	Karimganj	M	White	Germplasm
164	Karimganj	B	White	Germplasm
165	Karimganj	L	White	Landrace
166	Karimganj	L	White	Germplasm
167	Karimganj	M	Red	Germplasm
168	Karimganj	B	White	Landrace
169	Karimganj	ML	White	Landrace
170	Karimganj	ML	White	Landrace
171	Karimganj	ML	White	Landrace
172	Karimganj	B	White	Landrace
173	Karimganj	B	White	Landrace
174	Karimganj	M	White	Landrace
175	Karimganj	B	Amber	Landrace
176	Karimganj	ML	Red	Landrace
177	Karimganj	B	White	Landrace
178	Karimganj	L	White	Landrace
179	Karimganj	L	White	Landrace
180	Karimganj	B	White	Landrace
181	Karimganj	L	White	Landrace
182	Karimganj	M	White	Landrace
183	Karimganj	B	White	Landrace
184	Karimganj	B	White	Landrace
185	Karimganj	B	White	Landrace
186	Karimganj	S	White	Landrace
187	Karimganj	B	White	Germplasm

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188	Karimganj	B	White	Germplasm
189	Karimganj	B	White	Germplasm
190	Karimganj	M	Red	Germplasm
191	Karimganj	M	White	Germplasm
192	Karimganj	M	Red	Germplasm
193	Karimganj	M	White	Germplasm
194	Karimganj	B	White	Germplasm
195	Karimganj	B	White	Germplasm
196	Karimganj	M	White	Germplasm
197	Karimganj	M	White	Germplasm
198	Karimganj	B	White	Germplasm
199	Karimganj	M	White	Germplasm
200	Karimganj	B	White	Germplasm
201	Karimganj	M	White	Germplasm
202	Karimganj	BL	White	Germplasm
203	Karimganj	B	White	Landrace
204	Karimganj	B	White	Germplasm
205	Karimganj	B	White	Germplasm
206	Karimganj	B	Red	Germplasm
207	Karimganj	B	Red	Germplasm
208	Karimganj	B	Red	Germplasm
209	Karimganj	B	White	Germplasm
210	Karimganj	B	White	Germplasm
211	Karimganj	B	Red	Germplasm
212	Karimganj	M	White	Germplasm
213	Karimganj	B	White	Germplasm
214	Karimganj	B	White	Germplasm
215	Karimganj	M	White	Germplasm
216	Karimganj	B	Red	Germplasm
217	Karimganj	M	White	Germplasm
218	Karimganj	M	Amber	Germplasm
219	Karimganj	M	White	Germplasm
220	Karimganj	B	White	Germplasm
221	Karimganj	B	White	Germplasm
222	Karimganj	B	White	Germplasm
223	Karimganj	B	Amber	Germplasm
224	Karimganj	B	Red	Germplasm
225	Karimganj	B	White	Germplasm
226	Karimganj	M	White	Improvedline
227	Karimganj	M	White	Germplasm
228	Karimganj	M	White	Germplasm
229	Karimganj	M	White	Germplasm
230	Karimganj	M	White	Germplasm
231	Karimganj	M	Red	Germplasm
232	Karimganj	M	White	Germplasm
233	Karimganj	M	Red	Germplasm
234	Karimganj	M	White	Germplasm
235	Karimganj	M	Red	Germplasm
236	Karimganj	M	White	Germplasm
237	Karimganj	M	White	Germplasm
238	Karimganj	M	White	Germplasm

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239	Karimganj	L	Red	Germplasm
240	Karimganj	M	White	Germplasm
241	Karimganj	M	White	Germplasm
242	Karimganj	M	White	Germplasm
243	Karimganj	M	Red	Germplasm
244	Karimganj	B	Red	Germplasm
245	Karimganj	M	Red	Germplasm
246	Karimganj	M	White	Germplasm
247	Karimganj	M	White	Germplasm
248	Karimganj	M	White	Germplasm
249	Karimganj	M	White	Germplasm
250	Karimganj	M	White	Germplasm
251	Karimganj	M	Red	Germplasm
252	Karimganj	M	Red	Germplasm
253	Karimganj	M	Red	Germplasm
254	Karimganj	M	White	Germplasm
255	Karimganj	M	White	Germplasm
256	Karimganj	M	Red	Germplasm
257	Karimganj	M	Red	Germplasm
258	Karimganj	M	White	Germplasm
259	Karimganj	M	White	Germplasm
260	Karimganj	M	White	Germplasm
261	Karimganj	M	White	Germplasm
262	Karimganj	M	White	Germplasm
263	Karimganj	M	White	Germplasm
264	Karimganj	M	Red	Germplasm
265	Karimganj	M	Red	Breeding line
266	Karimganj	L	White	Breeding line
267	Karimganj	M	Red	Breeding line
268	Karimganj	L	White	Breeding line
269	Karimganj	M	White	Breeding line
270	Karimganj	M	White	Breeding line
271	Karimganj	M	White	Breeding line
272	Karimganj	M	White	Breeding line
273	Karimganj	M	White	Breeding line
274	Karimganj	M	White	Breeding line
275	Karimganj	M	White	Breeding line
276	Karimganj	L	White	Breeding line
277	Karimganj	L	White	Breeding line
278	Karimganj	M	White	Breeding line
279	Karimganj	M	White	Breeding line
280	Karimganj	L	White	Breeding line
281	Karimganj	M	White	Breeding line
282	Karimganj	M	White	Breeding line
283	Karimganj	M	White	Breeding line
284	Karimganj	M	White	Breeding line
285	Karimganj	M	White	Breeding line
286	Karimganj	L	White	Breeding line
287	Karimganj	M	White	Breeding line
288	Karimganj	M	White	Breeding line
289	Karimganj	L	White	Breeding line

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290	Karimganj	M	White	Breeding line
291	Karimganj	M	White	Breeding line
292	Karimganj	M	White	Breeding line
293	Karimganj	M	White	Breeding line
294	Karimganj	M	Red	Breeding line
295	Karimganj	L	White	Breeding line
296	Karimganj	M	White	Breeding line
297	Karimganj	M	White	Breeding line
298	Karimganj	M	White	Breeding line
299	Karimganj	L	Amber	Breeding line
300	Karimganj	M	Amber	Breeding line
301	Karimganj	M	White	Breeding line
302	Karimganj	S	White	Breeding line
303	Karimganj	M	White	Breeding line
304	Karimganj	L	White	Breeding line
305	Karimganj	L	White	Breeding line
306	Karimganj	M	White	Breeding line
307	Karimganj	M	White	Breeding line
308	Karimganj	M	White	Breeding line
309	Karimganj	M	White	Breeding line
310	Karimganj	M	White	Breeding line
311	Karimganj	L	White	Breeding line
312	Karimganj	M	White	Breeding line
313	Karimganj	M	Red	Breeding line
314	Karimganj	M	White	Breeding line
315	Karimganj	M	White	Breeding line
316	Karimganj	M	White	Breeding line
317	Karimganj	M	White	Breeding line
318	Karimganj	M	Red	Breeding line
319	Karimganj	M	Red	Breeding line
320	Karimganj	M	Red	Breeding line
321	Karimganj	M	Red	Breeding line
322	Karimganj	M	White	Breeding line
323	Karimganj	M	Amber	Breeding line
324	Karimganj	M	White	Breeding line
325	Karimganj	M	White	Breeding line
326	Karimganj	M	White	Breeding line
327	Karimganj	M	White	Breeding line
328	Karimganj	M	Red	Breeding line
329	Karimganj	M	Amber	Breeding line
330	Karimganj	M	White	Breeding line
331	Karimganj	M	White	Breeding line
332	Karimganj	L	Amber	Breeding line
333	Karimganj	M	White	Breeding line
334	Karimganj	M	Red	Breeding line
335	Karimganj	L	White	Breeding line
336	Karimganj	M	White	Breeding line
337	Karimganj	SF	Amber	Breeding line
338	Karimganj	M	White	Breeding line
339	Karimganj	SF	White	Breeding line
340	Karimganj	M	White	Breeding line

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341	Karimganj	M	Red	Breeding line
342	Karimganj	M	Red	Breeding line
343	Karimganj	M	White	Breeding line
344	Karimganj	M	White	Breeding line
345	Karimganj	M	Amber	Breeding line
346	Karimganj	L	White	Breeding line
347	Karimganj	M	White	Breeding line
348	Karimganj	L	White	Breeding line
349	Karimganj	M	White	Breeding line
350	Karimganj	M	White	Breeding line
351	Karimganj	M	Red	Breeding line
352	Karimganj	M	White	Breeding line
353	Karimganj	M	White	Breeding line
354	Karimganj	M	White	Breeding line
355	Karimganj	M	White	Breeding line
356	Karimganj	L	White	Breeding line
357	Karimganj	M	White	Breeding line
358	Karimganj	S	White	Breeding line
359	Karimganj	S	White	Breeding line
360	Karimganj	M	White	Breeding line
361	Karimganj	M	White	Breeding line
362	Karimganj	M	White	Breeding line
363	Karimganj	L	White	Breeding line
364	Karimganj	L	White	Breeding line
365	RARS, NLP	M	White	Germplasm
366	RARS, NLP	M	White	Germplasm
367	RARS, NLP	M	White	Germplasm
368	RARS, NLP	M	Red	Germplasm
369	RARS, NLP	M	White	Germplasm
370	RARS, NLP	M	White	Germplasm
371	RARS, NLP	M	White	Germplasm
372	RARS, NLP	M	White	Germplasm
373	RARS, NLP	M	White	Germplasm
374	RARS, NLP	M	White	Germplasm
375	RARS, NLP	M	White	Germplasm
376	RARS, NLP	S	White	Germplasm
377	RARS, NLP	L	White	Germplasm
378	RARS, NLP	M	White	Germplasm
379	RARS, NLP	M	White	Germplasm
380	RARS, NLP	S	White	Germplasm
381	RARS, NLP	M	White	Germplasm
382	RARS, NLP	M	Red	Germplasm
383	RARS, NLP	M	White	Germplasm
384	RARS, NLP	M	White	Germplasm
385	RARS, NLP	S	White	Germplasm
386	RARS, NLP	M	Red	Germplasm
387	RARS, NLP	M	White	Germplasm
388	RARS, NLP	M	Red	Germplasm
389	RARS, NLP	B	Red	Germplasm
390	RARS, NLP	M	White	Germplasm
391	RARS, NLP	L	White	Germplasm

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392	RARS, NLP	S	White	Germplasm
393	RARS, NLP	L	White	Germplasm
394	RARS, NLP	M	White	Germplasm
395	RARS, NLP	M	White	Germplasm
396	RARS, NLP	M	White	Germplasm
397	RARS, NLP	M	Red	Germplasm
398	RARS, NLP	S	White	Germplasm
399	RARS, NLP	M	Red	Germplasm
400	RARS, NLP	L	White	Germplasm
401	RARS, NLP	M	Red	Germplasm
402	RARS, NLP	M	White	Germplasm
403	RARS, NLP	M	White	Germplasm
404	RARS, NLP	M	White	Germplasm
405	RARS, NLP	M	White	Germplasm
406	RARS, NLP	M	White	Germplasm
407	RARS, NLP	M	White	Germplasm
408	RARS, NLP	M	White	Germplasm
409	RARS, NLP	M	White	Germplasm
410	RARS, NLP	M	White	Germplasm
411	RARS, NLP	M	White	Germplasm
412	RARS, NLP	M	White	Germplasm
413	RARS, NLP	M	White	Germplasm
414	RARS, NLP	M	White	Germplasm
415	RARS, NLP	M	White	Germplasm
416	RARS, NLP	M	Amber	Germplasm
417	RARS, NLP	M	White	Germplasm
418	RARS, NLP	L	White	Improved variety
419	RARS, NLP	M	White	Improved variety
420	RARS, NLP	M	White	Improved variety
421	RARS, NLP	B	White	Improved variety
422	RARS, NLP	M	Red	Improved variety
423	RARS, NLP	M	White	Improved variety
424	RARS, NLP	B	Red	Improved variety
425	RARS, NLP	L	White	Germplasm
426	RARS, NLP	M	White	Germplasm
427	RARS, NLP	M	White	Germplasm
428	RARS, NLP	M	White	Germplasm
429	RARS, NLP	L	White	Germplasm
430	RARS, NLP	L	White	Germplasm
431	RARS, NLP	LM	White	Germplasm
432	RARS, NLP	L	White	Germplasm
433	RARS, NLP	L	Amber	Germplasm
434	RARS, NLP	M	White	Germplasm
435	RARS, NLP	L	White	Germplasm
436	RARS, NLP	M	Red	Improved variety
437	RARS, NLP	M	Red	Improved variety
438	RARS, NLP	L	White	Improved variety
439	RARS, NLP	M	White	Improved variety
440	RARS, NLP	ML	White	Improved variety
441	RARS, NLP	M	White	Improved variety
442	RARS, NLP	M	White	Improved variety

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443	RARS, NLP	L	White	Improved variety
444	RARS, NLP	M	White	Traditional variety
445	RARS, NLP	S	White	Traditional variety
446	RARS, NLP	M	White	Traditional variety
447	RARS, NLP	M	White	Traditional variety
448	RARS, NLP	M	Red	Traditional variety
449	RARS, NLP	M	White	Traditional variety
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452	RARS, NLP	M	White	Traditional variety
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454	RARS, NLP	M	Red	Traditional variety
455	RARS, NLP	M	White	Traditional variety
456	RARS, NLP	M	White	Traditional variety
457	RARS, NLP	M	Red	Traditional variety
458	RARS, NLP	L	White	Traditional variety
459	RARS, NLP	M	White	Traditional variety
460	RARS, NLP	S	Red	Traditional variety
461	RARS, NLP	M	White	Traditional variety
462	RARS, NLP	M	White	Traditional variety
463	RARS, NLP	L	White	Traditional variety
464	RARS, NLP	M	Red	Traditional variety
465	RARS, NLP	ML	White	Traditional variety
466	RARS, NLP	L	White	Traditional variety
467	RARS, NLP	M	White	Traditional variety
468	RARS, NLP	M	White	Traditional variety
469	RARS, NLP	S	White	Traditional variety
470	RARS, NLP	M	White	Traditional variety
471	RARS, NLP	MS	White	Traditional variety
472	RARS, NLP	ML	White	Traditional variety
473	RARS, NLP	M	Red	Traditional variety
474	RARS, NLP	M	Red	Traditional variety
475	RARS, NLP	SF	White	Traditional variety
476	RARS, NLP	SF	Amber	Traditional variety
477	RARS, NLP	S	White	Germplasm
478	RARS, NLP	M	White	Germplasm
479	RARS, NLP	M	Red	Germplasm
480	RARS, NLP	M	White	Germplasm
481	RARS, NLP	M	Red	Germplasm
482	RARS, NLP	M	Red	Germplasm
483	RARS, NLP	L	White	Germplasm
484	RARS, NLP	L	Red	Germplasm
485	RARS, NLP	L	White	Germplasm
486	RARS, NLP	M	White	Germplasm
487	RARS, NLP	M	Red	Germplasm
488	RARS, NLP	L	Red	Germplasm
489	RARS, NLP	L	White	Germplasm
490	RARS, NLP	L	White	Germplasm
491	RARS, NLP	M	White	Germplasm
492	RARS, NLP	M	White	Germplasm
493	RARS, NLP	M	White	Germplasm

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494	RARS, NLP	M	White	Germplasm
495	RARS, NLP	M	White	Germplasm
496	RARS, NLP	M	Red	Germplasm
497	RARS, NLP	L	White	Germplasm
498	RARS, NLP	M	White	Germplasm
499	RARS, NLP	L	White	Germplasm
500	RARS, NLP	L	Red	Germplasm
501	RARS, NLP	B	White	Germplasm
502	RARS, NLP	B	White	Germplasm
503	RARS, NLP	L	White	Germplasm
504	RARS, NLP	M	White	Germplasm
505	RARS, NLP	M	White	Germplasm
506	RARS, NLP	M	White	Germplasm
507	RARS, NLP	L	White	Germplasm
508	RARS, NLP	M	White	Germplasm
509	RARS, NLP	L	White	Germplasm
510	RARS, NLP	L	Red	Germplasm
511	RARS, NLP	L	White	Germplasm
512	RARS, NLP	L	Red	Germplasm
513	RARS, NLP	M	White	Germplasm
514	RARS, NLP	L	White	Germplasm
515	RARS, NLP	L	White	Germplasm
516	RARS, NLP	L	White	Germplasm
517	RARS, NLP	M	White	Germplasm
518	RARS, NLP	M	White	Germplasm
519	RARS, NLP	M	White	Germplasm
520	RARS, NLP	M	White	Germplasm
521	RARS, NLP	M	Red	Germplasm
522	RARS, NLP	L	White	Germplasm
523	RARS, NLP	M	White	Germplasm
524	RARS, NLP	L	White	Germplasm
525	RARS, NLP	L	White	Germplasm
526	RARS, NLP	L	White	Germplasm
527	RARS, NLP	L	White	Germplasm
528	RARS, NLP	L	White	Germplasm
529	RARS, NLP	L	White	Germplasm
530	RARS, NLP	L	Red	Germplasm
531	RARS, NLP	L	White	Germplasm
532	RARS, NLP	L	White	Germplasm
533	RARS, NLP	L	White	Germplasm
534	RARS, NLP	LM	White	Germplasm
535	RARS, NLP	L	White	Germplasm
536	RARS, NLP	L	White	Germplasm
537	RARS, NLP	L	White	Germplasm
538	RARS, NLP	L	White	Germplasm
539	RARS, NLP	L	White	Germplasm
540	RARS, NLP	L	White	Germplasm
541	RARS, NLP	L	White	Germplasm
542	RARS, NLP	L	White	Germplasm
543	RARS, NLP	L	White	Germplasm
544	RARS, NLP	L	White	Germplasm

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545	Karimganj	M	White	Improved variety
546	Karimganj	LF	White	Improved variety
547	Karimganj	M	White	Landrace
548	Karimganj	B	White	Improved variety
549	Karimganj	ML	White	Germplasm
550	Karimganj	B	Amber	Landrace
551	Karimganj	LF	White	Landrace
552	Karimganj	ML	White	Improved variety
553	Karimganj	ML	White	Germplasm
554	Karimganj	M	White	Landrace
555	Karimganj	S	White	Improved variety
556	Karimganj	S	White	Landrace
557	Karimganj	LF	White	Improved variety
558	Karimganj	LF	White	Landrace
559	Karimganj	S	White	Landrace
560	Karimganj	M	White	Landrace
561	Karimganj	S	White	Landrace
562	Karimganj	B	White	Landrace
563	Karimganj	B	White	Landrace
564	Karimganj	B	White	Landrace
565	Karimganj	M	White	Landrace
566	Karimganj	LF	White	Landrace
567	Karimganj	M	White	Landrace
568	RARS, Diphu	ML	White	Landrace
569	RARS, Diphu	M	White	Landrace

Table 2 — Quantitative traits recorded among 569 *asra* rice accessions along with 5 checks

Sl. No.	Treatment	FDL	PH	SGT	NPH	PL	NGP	NCP	SFP	GYP
1	Badal (Check-1)	141	193.04	8.02	18.83	27.3	172.9	44.3	79.86	48.92
2	IET-21858 (Check-2)	118.73	139.78	6.77	19.78	28.9	147.0	19.0	88.81	39.45
3	MSE-9 (Check-3)	141.95	142.98	7.03	19.65	28.8	143.5	33.5	80.09	39.15
4	Manoharsali (Check-4)	144	138.67	6.97	21.30	29.0	136.8	26.1	83.67	44.16
5	Maguri Bao (Check-5)	135.56	172.13	6.25	13.00	27.7	170.4	58.7	74.39	11.53
6	AG-1	138	188.00	8.00	12.00	24.2	138.0	22.5	85.98	40.80
7	AG-2	148	173.20	7.00	17.00	27.7	128.0	5.5	95.88	24.79
8	AG-3	136	186.10	6.50	12.00	28.5	117.0	56.5	67.44	39.71
9	AG-4	144	185.00	6.50	9.00	22.0	73.0	8.5	89.57	21.57
10	AG-5	140	195.10	3.50	14.00	24.0	91.5	24.0	79.22	35.71
11	AG-6	138	215.50	6.00	7.00	25.9	111.0	42.0	72.55	19.57
12	AG-7	138	178.60	7.00	14.00	30.6	124.5	27.0	82.18	41.33
13	AG-8	137	161.00	8.50	10.00	27.0	164.0	19.5	89.37	37.33
14	AG-9	138	196.30	8.00	11.00	30.5	166.5	20.0	89.28	38.89
15	AG-10	144	189.00	8.00	8.00	26.9	153.5	20.5	88.22	45.41
16	AG-11	137	187.10	6.50	14.00	26.5	115.5	46.0	71.52	43.38
17	AG-12	150	138.20	6.00	15.00	28.7	182.0	21.5	89.43	40.81
18	AG-13	139	170.00	5.00	14.00	24.3	105.0	35.0	75.00	22.03
19	AG-14	143	181.20	5.50	11.00	22.5	98.0	10.5	90.32	42.24
20	AG-15	134	190.00	6.50	12.00	24.0	204.5	9.5	95.56	21.49
21	AG-16	144	179.00	7.00	6.00	28.9	199.0	57.0	77.73	15.21
22	AG-17	138	157.00	6.50	10.00	24.3	100.5	28.5	77.91	56.15

23	AG-18	134	155.20	7.00	10.00	30.0	148.0	8.0	94.87	33.51
24	AG-19	138	174.10	6.50	8.00	27.7	225.0	42.5	84.11	29.14
25	AG-20	141	195.60	6.50	7.00	25.4	149.5	27.5	84.46	28.35
26	AG-21	138	136.00	4.50	12.00	27.2	98.5	22.5	81.40	36.87
27	AG-22	134	165.10	7.50	13.00	28.2	105.5	13.5	88.66	39.82
28	AG-23	141	134.60	7.00	12.00	31.6	150.5	36.0	80.70	30.96
29	AG-24	141	171.60	5.00	18.00	31.3	124.0	34.5	78.23	33.27
30	AG-25	131	162.20	6.00	16.00	25.5	104.5	7.5	93.30	54.15
31	AG-26	137	200.00	5.00	7.00	31.2	229.5	34.0	87.10	73.84
32	AG-27	151	167.00	6.50	11.00	24.0	168.0	12.0	93.33	47.86
33	AG-28	138	174.50	6.00	20.00	29.3	137.0	21.0	86.71	32.84
34	AG-29	148	149.00	5.00	23.00	25.2	83.0	1.5	98.22	45.75
35	AG-30	144	183.50	6.00	12.00	26.2	128.0	43.5	74.64	48.58
36	AG-31	143	176.00	5.00	14.00	25.0	132.0	47.0	73.74	46.35
37	AG-32	127	130.00	5.50	10.00	29.8	187.0	6.5	96.64	29.89
38	AG-33	138	199.50	8.00	14.00	33.0	141.0	17.0	89.24	29.20
39	AG-34	150	140.50	4.50	27.00	23.8	103.5	11.5	90.00	16.29
40	AG-35	144	173.20	6.50	16.00	29.5	125.5	28.0	81.76	28.11
41	AG-36	132	149.50	6.00	15.00	25.0	88.0	1.0	98.88	33.37
42	AG-37	144	154.50	7.00	9.00	27.2	189.0	34.5	84.56	29.67
43	AG-38	140	141.30	5.00	9.00	30.8	92.5	10.0	90.24	20.47
44	AG-39	143	157.80	7.00	7.00	29.2	160.0	30.5	83.99	32.34
45	AG-40	139	166.00	6.50	11.00	24.5	110.0	54.5	66.87	33.33
46	AG-41	138	176.50	7.50	8.00	26.5	116.0	24.0	82.86	24.31
47	AG-42	144	165.30	7.00	7.00	26.6	109.0	12.5	89.71	47.05
48	AG-43	143	146.50	6.50	14.00	28.2	90.0	13.5	86.96	28.32
49	AG-44	132	161.00	6.00	14.00	29.8	144.0	14.5	90.85	34.11
50	AG-45	144	187.20	6.50	10.00	28.5	81.5	56.0	59.27	14.21
51	AG-46	137	173.50	6.00	7.00	29.3	134.0	47.5	73.83	54.62
52	AG-47	132	184.50	7.50	8.00	27.5	131.0	17.0	88.51	25.14
53	AG-48	137	169.00	8.50	10.00	27.2	205.5	19.5	91.33	40.16
54	AG-49	138	212.00	8.00	8.00	29.2	145.0	40.0	78.38	40.25
55	AG-50	143	168.50	7.00	6.00	27.7	153.0	22.0	87.43	52.95
56	AG-51	137	171.00	8.00	8.00	29.2	154.0	30.5	83.47	84.07
57	AG-52	139	170.20	8.00	10.00	27.8	139.5	22.0	86.38	42.29
58	AG-53	148	212.00	7.50	10.00	28.2	161.0	47.5	77.22	64.36
59	AG-54	134	162.50	8.00	10.00	23.8	116.5	14.0	89.27	49.63
60	AG-55	136	179.50	9.50	11.00	30.6	133.5	35.0	79.23	32.62
61	AG-56	137	205.70	8.00	13.00	27.0	118.5	30.0	79.80	27.96
62	AG-57	139	185.20	7.50	11.00	25.8	112.0	29.5	79.15	46.32
63	AG-58	143	219.50	6.00	8.00	28.2	162.5	18.0	90.03	31.98
64	AG-59	141	187.00	6.50	12.00	27.8	164.5	27.0	85.90	37.80
65	AG-60	137	183.10	5.50	11.00	28.2	120.0	13.0	90.23	26.12
66	AG-61	137	171.00	7.50	12.00	33.5	142.0	21.0	87.12	34.61
67	AG-62	138	145.20	6.00	13.00	24.2	109.5	14.5	88.31	24.19
68	AG-63	144	157.40	7.00	8.00	27.4	116.5	61.5	65.45	28.64
69	AG-64	138	167.00	7.00	8.00	32.0	176.0	30.0	85.44	15.85
70	AG-65	137	176.20	6.00	16.00	31.0	84.5	6.0	93.37	27.68
71	AG-66	144	205.70	7.50	10.00	25.7	103.5	61.5	62.73	48.94
72	AG-67	137	157.00	6.50	17.00	27.3	107.5	9.0	92.27	31.54
73	AG-68	134	169.60	7.00	14.00	26.7	110.0	18.0	85.94	29.32
74	AG-69	134	169.00	6.50	10.00	30.0	121.0	17.5	87.36	24.31
75	AG-70	134	168.00	7.50	12.00	32.2	118.0	27.5	81.10	32.53
76	AG-71	134	172.60	7.00	12.00	30.0	114.0	31.5	78.35	31.39
77	AG-72	137	155.00	6.50	9.00	29.0	230.5	46.5	83.21	26.11
78	AG-73	144	205.00	6.00	10.00	26.8	166.5	39.5	80.83	21.27
79	AG-74	138	153.90	7.00	15.00	27.5	181.5	19.0	90.52	35.45
80	AG-75	138	175.00	8.00	11.00	28.0	167.0	13.0	92.78	36.07
81	AG-76	136	171.50	6.50	7.00	27.5	170.0	58.5	74.40	94.13
82	AG-77	138	170.50	6.00	9.00	28.0	165.5	12.5	92.98	67.80
83	AG-78	134	129.30	7.00	16.00	30.4	115.5	109.0	51.45	34.54

84	AG-79	138	164.00	5.00	11.00	26.4	111.0	50.5	68.73	36.77
85	AG-80	141	186.50	6.00	10.00	36.0	138.0	13.0	91.39	43.76
86	AG-81	144	165.30	6.50	6.00	25.0	62.0	90.0	40.79	14.33
87	AG-82	138	175.20	5.00	8.00	35.8	116.0	22.5	83.75	41.04
88	AG-83	141	151.50	6.00	13.00	36.3	116.5	5.0	95.88	21.36
89	AG-84	138	185.40	8.50	14.00	32.6	152.5	21.5	87.64	30.78
90	AG-85	134	154.30	5.00	13.00	28.5	109.5	25.0	81.41	19.65
91	AG-86	148	178.00	9.00	15.00	29.0	89.5	87.5	50.56	32.27
92	AG-87	137	144.50	6.00	14.00	25.0	171.0	12.5	93.19	27.31
93	AG-88	138	150.00	6.00	12.00	27.5	117.5	14.5	89.02	34.44
94	AG-89	140	183.40	6.50	8.00	30.0	139.0	27.0	83.73	26.87
95	AG-90	139	196.00	6.00	13.00	24.5	148.0	55.0	72.91	15.28
96	AG-91	138	173.00	6.50	13.00	26.5	180.0	17.0	91.37	45.62
97	AG-92	136	154.50	6.50	15.00	32.0	145.0	44.0	76.72	41.34
98	AG-93	137	156.00	5.00	13.00	24.2	39.0	114.0	25.49	21.38
99	AG-94	137	165.30	5.50	17.00	29.3	114.0	21.5	84.13	29.64
100	AG-95	136	161.40	6.50	15.00	28.8	107.0	18.0	85.60	39.29
101	AG-96	141	174.10	7.00	15.00	32.3	133.0	35.5	78.93	54.80
102	AG-97	136	175.40	7.00	14.00	27.0	93.0	25.0	78.81	24.42
103	AG-98	138	200.50	5.50	15.00	26.2	98.5	7.0	93.36	49.92
104	AG-99	134	161.40	6.00	12.00	27.0	93.5	42.0	69.00	21.53
105	AG-100	140	200.50	7.00	14.00	26.3	102.5	11.0	90.31	66.42
106	AG-101	148	151.00	6.50	16.00	25.9	101.0	13.0	88.60	100.98
107	AG-102	138	178.30	5.00	19.00	27.7	102.0	23.0	81.60	29.03
108	AG-103	138	168.00	8.00	12.00	30.0	78.5	53.5	59.47	46.82
109	AG-104	137	152.30	7.00	11.00	25.6	103.5	32.5	76.10	50.37
110	AG-105	138	206.20	8.70	17.00	29.0	216.5	68.0	76.10	74.64
111	AG-106	138	191.00	8.30	19.00	28.1	151.0	21.0	87.79	68.54
112	AG-107	138	205.00	9.00	13.00	29.7	139.5	10.5	93.00	66.81
113	AG-108	139	200.00	9.00	15.00	22.5	171.5	11.5	93.72	55.66
114	AG-109	144	206.00	7.00	10.00	27.5	53.0	132.0	28.65	10.56
115	AG-110	147	193.20	8.00	15.00	26.3	167.5	51.0	76.66	21.88
116	AG-111	144	190.00	9.20	21.00	28.0	203.0	47.0	81.20	19.78
117	AG-112	139	203.70	7.00	17.00	23.8	161.0	11.0	93.60	37.23
118	AG-113	144	195.10	7.00	18.00	31.0	287.5	36.5	88.73	6.39
119	AG-114	143	171.00	6.50	14.00	28.2	106.5	32.5	76.62	45.75
120	AG-115	140	175.00	7.00	19.00	30.6	121.0	48.5	71.39	23.44
121	AG-116	140	173.10	6.00	27.00	30.3	141.0	10.5	93.07	12.40
122	AG-117	134	162.00	7.00	24.00	27.0	188.5	12.5	93.78	39.47
123	AG-118	138	174.90	7.50	16.00	30.0	122.0	33.5	78.46	23.36
124	AG-119	144	197.40	7.00	17.00	26.0	102.0	18.0	85.00	32.90
125	AG-120	141	168.50	7.80	21.00	31.4	130.0	39.5	76.70	63.73
126	AG-121	138	165.80	5.50	30.00	26.2	58.0	19.5	74.84	4.72
127	AG-122	147	189.00	7.00	15.00	30.4	153.5	21.0	87.97	22.97
128	AG-123	138	219.00	8.00	15.00	32.4	150.5	17.0	89.85	33.97
129	AG-124	143	202.00	8.20	18.00	27.7	145.5	29.5	83.14	55.46
130	AG-125	150	187.60	8.00	10.00	30.0	96.5	49.0	66.32	27.74
131	AG-126	137	188.00	8.00	10.00	29.7	141.5	16.5	89.56	61.80
132	AG-127	141	206.00	6.00	11.00	31.2	160.5	49.5	76.43	54.72
133	AG-128	137	193.20	7.00	10.00	26.2	176.5	36.5	82.86	85.26
134	AG-129	136	166.70	6.50	17.00	31.7	129.5	37.5	77.54	42.83
135	AG-130	140	211.10	7.30	11.00	28.3	174.0	22.0	88.78	59.18
136	AG-131	138	186.40	7.50	12.00	33.3	131.0	64.0	67.18	25.55
137	AG-132	151	164.30	8.50	12.00	28.0	146.5	13.0	91.85	43.59
138	AG-133	136	172.30	7.40	15.00	30.6	124.5	27.0	82.18	31.05
139	AG-134	148	176.60	6.00	17.00	33.8	109.5	56.0	66.16	16.66
140	AG-135	139	179.00	7.50	14.00	31.8	128.0	29.0	81.53	31.94
141	AG-136	141	165.00	7.80	16.00	26.3	67.0	38.5	63.51	11.71
142	AG-137	152	176.10	9.00	12.00	29.6	168.0	37.5	81.75	18.96
143	AG-138	141	182.40	8.50	11.00	26.3	132.5	40.5	76.59	49.84
144	AG-139	144	177.00	7.00	12.00	28.4	138.0	5.5	96.17	36.84



145	AG-140	143	192.00	7.00	9.00	24.5	86.5	57.5	60.07	15.49
146	AG-141	150	195.00	7.20	11.00	23.6	159.0	29.0	84.57	50.70
147	AG-142	143	189.10	8.30	14.00	28.5	169.0	33.5	83.46	32.99
148	AG-143	134	167.70	7.00	14.00	28.7	121.5	48.5	71.47	23.88
149	AG-144	136	183.20	6.50	19.00	33.5	165.5	10.0	94.30	33.91
150	AG-145	143	155.60	7.80	16.00	26.2	141.5	61.5	69.70	30.02
151	AG-146	134	164.00	6.50	19.00	31.0	199.5	20.0	90.89	25.06
152	AG-147	143	151.80	7.00	25.00	30.2	138.5	15.5	89.94	23.52
153	AG-148	138	185.00	7.70	20.00	30.0	123.5	9.0	93.21	37.03
154	AG-149	137	216.00	9.00	24.00	29.2	144.5	24.0	85.76	31.35
155	AG-150	138	137.30	7.00	17.00	29.3	150.0	17.5	89.55	60.51
156	AG-151	137	180.00	7.00	23.00	30.0	131.5	10.5	92.61	63.95
157	AG-152	139	181.20	6.00	22.00	30.6	153.0	16.5	90.27	52.08
158	AG-153	139	181.00	7.50	11.00	29.7	176.0	25.5	87.34	51.00
159	AG-154	144	186.00	9.00	12.00	31.0	215.0	118.5	64.47	69.14
160	AG-155	139	170.00	8.00	11.00	33.2	97.0	43.0	69.29	17.10
161	AG-156	134	181.70	8.00	10.00	27.9	141.5	24.5	85.24	41.13
162	AG-157	138	177.00	7.50	8.00	28.6	107.0	10.0	91.45	29.46
163	AG-158	141	168.00	8.00	6.00	29.5	160.5	32.5	83.16	39.04
164	AG-159	137	168.00	7.00	9.00	30.0	93.0	55.0	62.84	22.34
165	AG-160	141	195.10	7.50	9.00	30.6	186.5	28.5	86.74	17.26
166	AG-161	146	172.00	7.50	11.00	25.3	187.0	21.0	89.90	37.14
167	AG-162	138	162.00	7.00	11.00	27.1	111.0	15.0	88.10	29.90
168	AG-163	144	162.70	7.00	12.00	28.6	122.5	2.5	98.00	47.14
169	AG-164	136	158.60	8.00	8.00	28.3	181.0	23.0	88.73	64.62
170	AG-165	137	160.00	8.50	8.00	26.5	154.5	16.5	90.35	42.12
171	AG-166	137	187.30	8.00	8.00	26.7	153.5	17.5	89.77	49.20
172	AG-167	136	165.10	9.00	9.00	28.2	82.5	57.0	59.14	17.90
173	AG-168	138	162.00	8.00	10.00	29.6	180.0	23.0	88.67	31.24
174	AG-169	138	175.20	6.70	11.00	25.6	118.5	11.0	91.51	27.55
175	AG-170	143	190.00	6.80	7.00	27.2	99.5	16.5	85.78	43.64
176	AG-171	132	165.10	7.00	11.00	27.7	127.5	28.5	81.73	19.10
177	AG-172	141	168.00	9.00	8.00	29.8	180.0	29.0	86.12	43.93
178	AG-173	136	210.40	7.80	11.00	30.1	110.5	10.5	91.32	65.54
179	AG-174	150	160.00	7.00	17.00	22.9	140.5	19.5	87.81	46.85
180	AG-175	138	183.50	9.00	10.00	31.0	118.5	10.5	91.86	30.41
181	AG-176	140	193.40	9.00	13.00	34.0	191.5	30.5	86.26	31.36
182	AG-177	132	227.20	10.00	11.00	32.2	149.5	61.5	70.85	55.81
183	AG-178	144	177.00	7.50	14.00	31.0	73.0	68.5	51.59	62.29
184	AG-179	137	190.00	6.00	12.00	31.5	155.0	34.0	82.01	50.97
185	AG-180	141	203.00	7.00	14.00	29.4	164.0	56.5	74.38	36.74
186	AG-181	127	203.20	7.50	15.00	27.6	141.0	19.0	88.13	33.72
187	AG-182	144	133.50	7.00	22.00	30.6	164.5	17.5	90.38	33.74
188	AG-183	138	204.20	7.00	18.00	30.1	246.0	60.0	80.39	32.47
189	AG-184	130	162.00	8.50	19.00	26.0	82.5	21.5	79.33	22.61
190	AG-185	138	176.00	5.50	13.00	28.0	124.5	23.5	84.12	30.28
191	AG-186	130	171.00	6.50	20.00	29.0	171.0	18.0	90.48	34.83
192	AG-187	137	161.00	8.00	13.00	29.3	156.0	18.0	89.66	38.30
193	AG-188	151	126.50	9.40	15.00	26.0	185.0	3.5	98.14	66.41
194	AG-189	157	146.00	8.50	14.00	25.8	154.5	13.5	91.96	57.07
195	AG-190	138	159.10	7.00	12.00	23.8	144.0	17.0	89.44	40.58
196	AG-191	137	223.00	8.20	7.00	27.1	150.0	16.5	90.09	37.41
197	AG-192	137	190.00	9.00	11.00	26.6	195.0	8.5	95.82	35.11
198	AG-193	137	195.70	8.00	12.00	32.5	173.5	16.5	91.32	23.57
199	AG-194	150	178.70	7.70	14.00	29.3	158.0	51.5	75.42	48.43
200	AG-195	145	161.00	7.00	13.00	28.0	186.0	78.0	70.45	40.97
201	AG-196	141	177.00	9.00	9.00	33.6	245.5	75.0	76.60	65.94
202	AG-197	119	117.60	7.90	9.00	23.5	154.0	7.0	95.65	7.19
203	AG-198	144	166.00	9.00	8.00	27.0	223.5	133.5	62.61	66.22
204	AG-199	137	159.20	7.40	13.00	32.8	206.0	34.0	85.83	65.10
205	AG-200	130	180.10	7.50	14.00	29.2	212.5	41.0	83.83	85.22

206	AG-201	144	196.50	6.00	8.00	30.0	79.5	41.0	65.98	34.79
207	AG-202	137	186.00	7.00	8.00	31.3	176.5	17.0	91.21	22.74
208	AG-203	144	198.40	7.50	9.00	31.0	196.5	19.0	91.18	48.43
209	AG-204	137	191.50	8.50	6.00	29.8	161.0	64.5	71.40	47.74
210	AG-205	124	182.50	7.00	8.00	25.8	154.0	11.0	93.33	42.06
211	AG-206	138	177.00	8.00	7.00	29.7	119.0	47.5	71.47	38.49
212	AG-207	136	181.60	6.50	8.00	28.3	146.0	58.5	71.39	50.30
213	AG-208	137	188.00	8.00	6.00	34.4	128.0	50.0	71.91	22.98
214	AG-209	147	200.40	7.00	7.00	33.2	187.5	37.5	83.33	47.10
215	AG-210	138	133.50	5.00	9.00	27.7	109.5	11.5	90.50	27.66
216	AG-211	136	164.50	7.00	12.00	32.9	166.5	46.0	78.35	27.24
217	AG-212	141	169.00	7.00	9.00	29.0	143.0	47.0	75.26	69.52
218	AG-213	136	151.70	5.50	21.00	24.7	96.5	8.0	92.34	37.96
219	AG-214	146	171.50	8.50	16.00	26.8	174.5	35.5	83.10	61.85
220	AG-215	131	117.50	5.00	15.00	26.4	148.0	11.0	93.08	52.81
221	AG-216	138	185.50	4.50	13.00	30.0	157.5	22.0	87.74	38.94
222	AG-217	148	167.10	7.50	13.00	28.0	203.0	25.0	89.04	47.65
223	AG-218	136	166.00	5.00	10.00	30.2	159.5	13.5	92.20	43.74
224	AG-219	150	130.00	6.50	15.00	26.6	181.0	8.0	95.77	58.28
225	AG-220	144	193.50	6.50	12.00	26.3	103.5	109.0	48.71	32.29
226	AG-221	145	182.50	7.00	9.00	25.5	153.0	6.5	95.92	76.79
227	AG-222	144	162.30	8.00	10.00	24.5	98.5	32.5	75.19	88.12
228	AG-223	145	169.50	8.50	13.00	24.4	96.0	35.0	73.28	61.42
229	AG-224	134	181.50	8.00	13.00	32.0	127.5	47.5	72.86	33.21
230	AG-225	125	140.80	6.00	14.00	25.6	130.0	30.0	81.25	53.88
231	AG-226	148	168.10	8.00	13.00	32.7	198.5	15.5	92.76	51.41
232	AG-227	147	182.00	8.50	9.00	35.0	237.0	32.5	87.94	73.36
233	AG-228	136	184.00	6.50	10.00	32.4	127.0	8.0	94.07	60.23
234	AG-229	138	115.20	8.00	14.00	28.5	181.0	19.5	90.27	34.19
235	AG-230	141	195.30	9.00	9.00	30.5	194.0	43.0	81.86	53.87
236	AG-231	137	169.10	9.00	7.00	32.5	165.0	53.0	75.69	27.30
237	AG-232	130	119.50	7.00	9.00	27.0	124.5	13.0	90.55	35.39
238	AG-233	144	167.00	7.00	10.00	29.2	110.0	26.0	80.88	33.09
239	AG-234	146	187.00	7.50	10.00	26.2	194.5	44.5	81.38	68.38
240	AG-235	143	190.00	8.00	11.00	29.1	91.0	61.0	59.87	41.43
241	AG-236	144	155.00	7.00	10.00	31.5	94.0	50.5	65.05	56.26
242	AG-237	138	189.00	7.00	11.00	34.0	171.0	15.0	91.94	33.27
243	AG-238	150	150.00	7.50	10.00	30.0	290.5	16.5	94.63	46.92
244	AG-239	137	178.60	9.00	12.00	35.0	168.0	33.5	83.37	35.86
245	AG-240	151	126.50	8.50	14.00	26.6	182.5	10.5	94.56	50.33
246	AG-241	144	186.40	7.00	10.00	35.8	73.0	50.5	59.11	10.48
247	AG-242	137	202.00	8.00	12.00	29.8	210.0	19.0	91.70	54.64
248	AG-243	140	196.00	9.50	16.00	32.8	152.0	38.5	79.79	42.59
249	AG-244	144	184.00	8.00	13.00	28.8	161.5	55.0	74.60	30.99
250	AG-245	134	192.60	6.00	22.00	26.5	87.5	22.0	79.91	27.54
251	AG-246	148	167.00	7.80	14.00	31.5	215.0	23.0	90.34	41.48
252	AG-247	144	165.10	6.80	18.00	31.8	180.0	27.0	86.96	51.71
253	AG-248	140	205.40	8.00	15.00	24.1	97.5	26.0	78.95	40.76
254	AG-249	134	200.00	8.50	10.00	29.8	107.5	11.5	90.34	14.27
255	AG-250	141	191.00	8.00	20.00	28.8	117.5	51.0	69.73	25.59
256	AG-251	144	193.00	9.00	22.00	27.7	151.5	53.0	74.08	64.09
257	AG-252	137	198.00	7.50	18.00	24.8	210.5	18.5	91.92	74.84
258	AG-253	119	178.40	8.00	9.00	24.5	83.0	15.0	84.69	53.18
259	AG-254	138	213.00	9.00	13.00	29.2	210.5	50.5	80.65	22.26
260	AG-255	136	184.00	8.00	11.00	27.8	125.5	45.0	73.61	34.84
261	AG-256	143	153.00	7.00	6.00	26.6	104.0	20.5	83.53	45.54
262	AG-257	132	189.00	8.00	9.00	30.8	172.5	32.0	84.35	21.11
263	AG-258	145	183.20	9.00	10.00	22.4	125.0	25.0	83.33	39.91
264	AG-259	138	156.00	8.00	9.00	30.8	169.5	48.0	77.93	59.31
265	AG-260	136	189.00	8.00	10.00	27.0	84.5	21.5	79.72	58.30
266	AG-261	123	112.40	6.50	11.00	22.5	100.5	43.0	70.03	22.19

267	AG-262	148	163.40	7.50	12.00	23.4	107.0	64.0	62.57	29.76
268	AG-263	138	164.00	7.00	11.00	29.0	118.0	28.0	80.82	32.35
269	AG-264	134	173.00	8.00	13.00	29.7	125.5	22.5	84.80	36.40
270	AG-265	137	198.00	6.50	15.00	27.5	143.5	18.5	88.58	30.77
271	AG-266	148	165.00	9.00	5.00	36.3	158.0	43.0	78.61	32.44
272	AG-267	137	190.00	6.50	9.00	30.4	195.0	26.5	88.04	63.80
273	AG-268	143	167.60	6.90	9.00	31.0	103.0	19.0	84.43	52.12
274	AG-269	148	175.00	9.00	8.00	27.8	124.0	117.5	51.35	28.04
275	AG-270	138	175.00	7.30	13.00	27.0	104.5	102.0	50.61	25.82
276	AG-271	141	173.10	8.50	9.00	27.1	142.5	48.0	74.80	37.87
277	AG-272	141	192.00	8.30	8.00	30.4	166.5	104.5	61.44	4.74
278	AG-273	148	171.00	9.50	10.00	31.2	153.0	24.0	86.44	68.37
279	AG-274	137	176.00	8.00	24.00	27.3	149.5	28.0	84.23	27.05
280	AG-275	136	173.00	7.20	25.00	26.5	104.5	19.0	84.62	57.75
281	AG-276	140	195.00	9.50	18.00	23.5	134.0	7.0	95.04	87.58
282	AG-277	137	180.00	6.80	21.00	25.4	103.5	17.5	85.54	59.59
283	AG-278	134	206.60	7.20	22.00	28.4	149.5	53.0	73.83	45.40
284	AG-279	136	114.60	7.00	13.00	23.6	138.0	27.5	83.38	26.33
285	AG-280	141	184.00	8.50	10.00	32.0	195.5	37.5	83.91	36.56
286	AG-281	140	175.00	8.00	11.00	29.0	152.0	36.0	80.85	32.60
287	AG-282	146	158.00	6.00	15.00	31.2	155.0	7.0	95.68	47.04
288	AG-283	138	204.00	7.40	12.00	27.7	132.0	46.5	73.95	36.16
289	AG-284	144	173.00	8.00	16.00	28.7	120.0	64.0	65.22	36.28
290	AG-285	138	165.70	9.00	7.00	30.0	245.0	39.0	86.27	80.30
291	AG-286	137	166.00	6.00	23.00	28.2	167.0	35.0	82.67	72.65
292	AG-287	136	195.00	7.50	11.00	27.7	171.0	53.0	76.34	100.99
293	AG-288	143	167.00	8.00	12.00	25.7	191.0	53.5	78.12	59.03
294	AG-289	136	170.00	6.00	18.00	24.5	104.0	14.0	88.14	28.33
295	AG-290	140	155.00	7.00	18.00	29.4	112.5	33.5	77.05	21.26
296	AG-291	152	131.00	7.20	11.00	25.3	161.5	22.5	87.77	37.99
297	AG-292	148	148.60	8.00	15.00	25.2	128.0	9.5	93.09	49.64
298	AG-293	151	131.00	7.00	12.00	28.3	119.0	30.0	79.87	32.12
299	AG-294	139	194.00	9.00	13.00	29.3	132.0	16.5	88.89	45.72
300	AG-295	144	183.40	8.00	12.00	27.8	239.5	49.5	82.87	38.19
301	AG-296	138	194.70	7.00	9.00	32.0	149.5	29.0	83.75	26.80
302	AG-297	139	213.70	7.50	11.00	29.4	111.5	19.0	85.44	34.90
303	AG-298	138	164.60	7.50	17.00	29.6	153.0	17.5	89.74	42.85
304	AG-299	138	176.10	8.00	19.00	29.6	104.5	13.5	88.56	68.49
305	AG-300	142	198.00	8.50	18.00	26.3	132.5	15.5	89.53	37.71
306	AG-301	152	143.00	8.00	8.00	23.5	133.5	6.5	95.36	55.68
307	AG-302	138	161.00	6.80	18.00	29.5	217.5	58.5	78.80	33.98
308	AG-303	144	180.00	6.50	25.00	28.0	109.0	12.5	89.71	46.61
309	AG-304	137	178.00	7.50	11.00	26.4	133.0	22.0	85.81	31.47
310	AG-305	150	182.60	7.00	15.00	27.4	132.0	14.0	90.41	28.73
311	AG-306	137	163.00	8.00	16.00	27.4	203.0	32.5	86.20	39.23
312	AG-307	136	202.00	7.00	20.00	29.3	210.0	33.5	86.24	35.51
313	AG-308	144	214.00	9.00	16.00	31.8	218.5	75.0	74.45	43.27
314	AG-309	138	167.60	8.30	10.00	29.3	177.0	68.0	72.24	79.89
315	AG-310	144	156.00	7.00	13.00	26.3	148.0	24.0	86.05	43.43
316	AG-311	136	178.90	6.20	24.00	29.7	116.5	12.0	90.66	26.42
317	AG-312	124	155.00	8.20	27.00	28.5	203.0	26.5	88.45	51.50
318	AG-313	137	173.00	6.00	20.00	26.7	118.5	17.0	87.45	32.62
319	AG-314	144	146.00	6.50	15.00	23.0	206.5	19.0	91.57	26.69
320	AG-315	138	157.50	8.00	16.00	32.7	106.5	56.5	65.34	38.56
321	AG-316	144	157.20	7.50	9.00	29.5	104.5	43.5	70.61	20.69
322	AG-317	137	198.40	6.80	10.00	27.8	130.5	3.5	97.39	23.79
323	AG-318	138	179.00	7.00	12.00	26.0	80.0	70.0	53.33	17.88
324	AG-319	137	198.00	8.00	15.00	26.7	122.5	52.0	70.20	31.22
325	AG-320	139	190.00	7.00	11.00	29.0	137.0	7.0	95.14	19.07
326	AG-321	138	205.00	6.00	12.00	31.4	174.0	45.5	79.27	30.57
327	AG-322	136	203.70	8.00	7.00	29.5	145.5	21.5	87.13	31.68

328	AG-323	150	179.00	7.20	15.00	25.7	155.5	77.5	66.74	26.74
329	AG-324	138	112.70	7.00	12.00	22.8	116.5	81.5	58.84	49.61
330	AG-325	150	208.40	8.20	12.00	34.0	179.0	46.0	79.56	30.64
331	AG-326	139	176.50	7.00	19.00	31.3	216.0	40.5	84.21	56.26
332	AG-327	144	175.00	8.50	7.00	28.1	260.5	19.0	93.20	70.03
333	AG-328	137	202.00	7.00	11.00	26.0	222.5	10.0	95.70	54.47
334	AG-329	127	164.50	7.00	24.00	27.1	144.5	49.5	74.48	28.14
335	AG-330	138	190.50	6.50	22.00	27.4	131.0	15.5	89.42	75.83
336	AG-331	138	147.00	8.00	18.00	28.6	171.0	39.0	81.43	63.40
337	AG-332	138	201.50	7.00	11.00	29.5	216.5	27.0	88.91	33.91
338	AG-333	136	186.00	7.00	9.00	29.7	184.0	67.0	73.31	36.55
339	AG-334	137	183.50	6.00	13.00	28.3	160.0	36.5	81.42	57.17
340	AG-335	125	143.70	5.00	16.00	24.5	97.5	13.5	87.84	10.94
341	AG-336	140	186.50	7.00	17.00	27.6	168.5	9.5	94.66	30.82
342	AG-337	148	151.80	6.50	20.00	32.8	183.0	56.5	76.41	50.01
343	AG-338	142	190.00	6.00	17.00	29.6	103.5	62.0	62.54	27.50
344	AG-339	151	135.60	7.00	20.00	25.8	261.5	31.5	89.25	56.27
345	AG-340	119	134.70	5.00	10.00	26.3	168.0	20.5	89.12	21.45
346	AG-341	142	176.00	7.00	11.00	31.2	140.5	66.5	67.87	20.71
347	AG-342	138	188.10	5.00	18.00	26.1	161.5	36.0	81.77	18.53
348	AG-343	150	139.00	7.50	17.00	26.0	152.5	21.0	87.90	50.35
349	AG-344	136	167.50	8.00	10.00	28.3	245.5	43.0	85.10	49.75
350	AG-345	132	137.60	7.00	8.00	27.2	224.0	10.5	95.52	43.99
351	AG-346	139	180.00	5.00	14.00	26.7	104.0	12.0	89.66	28.69
352	AG-347	141	169.50	6.00	11.00	25.5	158.5	12.5	92.69	42.78
353	AG-348	136	190.00	8.50	10.00	26.0	135.0	15.0	90.00	30.55
354	AG-349	131	187.50	6.50	11.00	30.0	196.0	22.0	89.91	56.94
355	AG-350	144	202.50	7.50	12.00	22.8	171.0	27.0	86.36	38.68
356	AG-351	134	175.00	8.50	9.00	24.7	157.5	15.5	91.04	65.29
357	AG-352	144	205.50	7.50	11.00	33.5	154.0	65.5	70.16	37.76
358	AG-353	136	194.50	8.50	12.00	26.0	169.5	29.5	85.18	43.24
359	AG-354	152	155.00	7.00	16.00	28.2	141.5	48.0	74.67	41.65
360	AG-355	143	158.60	7.00	17.00	24.5	101.5	26.5	79.30	41.19
361	AG-356	138	185.00	7.20	17.00	27.9	140.0	33.0	80.92	52.90
362	AG-357	147	159.20	7.50	17.00	28.8	161.5	17.0	90.48	49.47
363	AG-358	130	145.00	7.00	13.00	29.2	344.0	18.0	95.03	74.70
364	AG-359	134	181.80	8.00	28.00	26.7	235.5	39.5	85.64	50.86
365	AG-360	144	193.00	9.50	9.00	29.0	178.0	81.0	68.73	74.08
366	AG-361	144	200.50	8.00	20.00	29.7	218.0	45.5	82.73	42.05
367	AG-362	123	154.00	7.50	22.00	25.7	120.0	59.5	66.85	12.95
368	AG-363	138	163.00	7.00	18.00	33.3	109.0	87.0	55.61	33.80
369	AG-364	138	179.50	8.00	8.00	27.8	116.0	18.5	86.25	85.68
370	AG-365	127	165.60	8.00	19.00	23.5	148.5	9.0	94.29	59.19
371	AG-366	136	116.50	9.00	16.00	23.0	209.5	30.5	87.29	48.73
372	AG-367	119	151.50	7.00	15.00	29.4	178.5	21.5	89.25	38.64
373	AG-368	131	192.50	7.50	13.00	25.3	167.5	29.0	85.24	60.39
374	AG-369	151	195.00	9.00	14.00	24.5	152.0	43.5	77.75	65.00
375	AG-370	137	164.50	7.00	12.00	25.0	61.5	28.0	68.72	43.30
376	AG-371	127	117.50	6.20	15.00	28.5	150.0	9.0	94.34	49.63
377	AG-372	139	149.50	8.20	16.00	23.7	85.0	10.0	89.47	26.33
378	AG-373	137	215.50	7.00	15.00	24.0	92.5	39.5	70.08	27.12
379	AG-374	137	197.00	7.00	18.00	30.8	147.0	17.5	89.36	58.44
380	AG-375	137	149.50	8.50	13.00	24.2	67.5	47.0	58.95	41.88
381	AG-376	146	154.00	5.50	14.00	30.4	143.5	11.5	92.58	10.23
382	AG-377	137	165.00	7.20	11.00	32.2	215.0	15.0	93.48	54.41
383	AG-378	150	162.50	6.80	15.00	23.2	196.0	12.5	94.00	39.28
384	AG-379	137	152.70	6.50	10.00	26.0	247.5	34.0	87.92	72.37
385	AG-380	145	173.60	7.50	12.00	32.0	161.0	202.5	44.29	28.75
386	AG-381	148	136.00	7.00	9.00	24.7	100.0	18.5	84.39	37.60
387	AG-382	141	194.50	7.50	12.00	26.4	93.5	58.0	61.72	44.06
388	AG-383	139	128.00	7.00	18.00	28.5	165.5	28.5	85.31	38.08

389	AG-384	145	178.00	7.00	16.00	26.4	151.5	52.0	74.45	10.23
390	AG-385	137	153.50	7.50	13.00	27.5	188.0	20.5	90.17	72.30
391	AG-386	142	195.00	7.50	13.00	29.2	167.5	60.0	73.63	30.77
392	AG-387	124	196.50	8.50	16.00	29.3	131.5	22.0	85.67	28.87
393	AG-388	143	188.00	8.60	13.00	29.0	128.5	85.5	60.05	52.54
394	AG-389	136	210.00	7.60	19.00	23.7	81.5	22.5	78.37	20.03
395	AG-390	145	177.60	7.00	14.00	30.5	144.5	18.5	88.65	41.46
396	AG-391	136	205.00	7.50	17.00	25.5	66.0	43.5	60.27	30.13
397	AG-392	132	153.00	6.00	18.00	26.5	132.5	16.0	89.23	42.37
398	AG-393	127	130.00	6.50	23.00	26.5	132.0	10.5	92.63	46.45
399	AG-394	124	149.50	7.00	17.00	26.3	90.0	29.0	75.63	51.71
400	AG-395	139	163.00	8.00	15.00	27.7	104.5	10.5	90.87	47.75
401	AG-396	124	177.00	7.00	15.00	26.2	109.5	7.0	93.99	14.44
402	AG-397	141	198.20	8.20	11.00	26.8	83.5	26.5	75.91	51.73
403	AG-398	144	167.50	7.00	25.00	28.7	100.0	56.0	64.10	31.41
404	AG-399	138	174.30	6.90	22.00	27.5	146.5	14.0	91.28	79.39
405	AG-400	146	186.00	8.00	12.00	31.5	70.0	59.5	54.05	46.78
406	AG-401	144	208.00	8.50	14.00	25.5	168.0	41.5	80.19	30.51
407	AG-402	152	149.10	6.00	16.00	32.0	350.0	23.0	93.83	60.14
408	AG-403	146	182.40	7.00	17.00	31.3	94.5	60.0	61.17	12.26
409	AG-404	124	157.00	7.50	16.00	31.0	195.0	36.0	84.42	54.45
410	AG-405	137	201.00	6.50	12.00	31.2	141.0	28.0	83.43	56.86
411	AG-406	138	183.20	9.00	12.00	27.1	170.0	4.5	97.42	63.11
412	AG-407	145	174.00	6.50	16.00	28.3	264.0	61.0	81.23	36.88
413	AG-408	148	151.00	7.00	14.00	31.7	164.0	42.0	79.61	90.33
414	AG-409	151	115.20	7.00	22.00	25.5	184.5	9.5	95.10	49.97
415	AG-410	132	185.70	7.50	10.00	29.1	147.5	32.0	82.17	35.94
416	AG-411	134	146.00	5.00	19.00	26.2	198.0	16.5	92.31	50.03
417	AG-412	124	207.00	8.00	15.00	30.3	160.5	9.0	94.69	27.34
418	AG-413	136	167.30	6.00	24.00	26.8	116.5	24.5	82.62	75.62
419	AG-414	150	170.00	7.00	15.00	24.4	138.0	19.0	87.90	55.40
420	AG-415	136	160.10	5.50	17.00	24.8	109.0	21.0	83.85	43.56
421	AG-416	140	156.00	4.50	17.00	25.3	114.5	14.0	89.11	12.63
422	AG-417	138	139.00	6.00	21.00	26.6	135.5	6.5	95.42	45.62
423	AG-418	143	189.50	6.50	16.00	31.6	100.0	39.0	71.94	48.84
424	AG-419	138	165.20	7.00	16.00	27.6	149.5	8.0	94.92	51.88
425	AG-420	148	178.00	8.00	17.00	25.8	102.0	33.0	75.56	49.65
426	AG-421	143	143.70	7.00	18.00	26.3	119.0	12.0	90.84	37.88
427	AG-422	127	143.00	6.50	17.00	34.8	143.0	23.5	85.89	30.76
428	AG-423	144	176.00	6.00	21.00	27.8	178.0	58.5	75.26	32.57
429	AG-424	130	188.00	7.50	19.00	39.5	174.5	36.0	82.90	39.15
430	AG-425	136	179.00	7.50	22.00	30.4	129.5	67.0	65.90	49.56
431	AG-426	138	151.00	8.00	28.00	32.5	169.5	26.0	86.70	27.68
432	AG-427	138	177.00	8.00	25.00	29.5	180.0	12.0	93.75	66.92
433	AG-428	138	174.60	9.00	24.00	34.3	149.0	26.5	84.90	64.05
434	AG-429	133	166.00	8.00	26.00	24.5	148.5	21.5	87.35	52.38
435	AG-430	138	193.10	8.00	10.00	31.7	144.0	20.5	87.54	83.90
436	AG-431	144	181.00	8.20	17.00	28.2	246.0	83.0	74.77	31.06
437	AG-432	145	161.20	8.50	7.00	25.2	177.0	36.0	83.10	70.67
438	AG-433	137	178.60	8.50	9.00	28.0	159.0	10.0	94.08	82.37
439	AG-434	148	155.00	10.00	12.00	27.4	226.0	21.5	91.31	86.45
440	AG-435	138	178.60	8.00	8.00	27.0	227.5	31.0	88.01	90.74
441	AG-436	143	183.20	8.00	14.00	27.7	191.5	20.5	90.33	37.09
442	AG-437	143	198.00	9.00	17.00	27.5	222.5	44.5	83.33	74.13
443	AG-438	137	179.60	8.50	16.00	31.2	164.0	17.0	90.61	65.41
444	AG-439	131	157.20	6.00	22.00	24.5	138.0	19.0	87.90	42.43
445	AG-440	142	190.00	9.00	16.00	28.3	172.0	41.5	80.56	69.70
446	AG-441	132	152.60	7.00	25.00	26.5	242.5	13.5	94.73	48.70
447	AG-442	140	130.00	7.20	15.00	28.0	133.5	17.0	88.70	59.35
448	AG-443	137	200.00	7.50	28.00	29.7	119.5	11.5	91.22	65.56
449	AG-444	134	166.40	7.00	19.00	28.6	141.0	10.5	93.07	62.94

450	AG-445	140	127.70	7.00	14.00	24.5	108.5	8.5	92.74	67.89
451	AG-446	138	183.70	9.50	14.00	27.5	214.5	30.5	87.55	96.35
452	AG-447	139	212.00	8.00	18.00	25.3	156.5	16.5	90.46	42.76
453	AG-448	137	179.00	7.20	23.00	28.5	98.5	56.0	63.75	66.58
454	AG-449	138	198.00	8.00	22.00	27.5	120.0	39.0	75.47	72.04
455	AG-450	134	216.00	7.50	12.00	25.4	119.0	26.0	82.07	30.00
456	AG-451	139	172.00	7.00	18.00	30.5	135.0	23.5	85.17	58.49
457	AG-452	144	167.50	7.00	17.00	26.0	99.5	32.5	75.38	12.82
458	AG-453	144	206.00	8.00	19.00	29.3	154.5	20.0	88.54	33.78
459	AG-454	141	197.00	8.00	23.00	30.4	136.5	93.5	59.35	30.05
460	AG-455	139	175.00	5.00	22.00	28.9	133.5	26.0	83.70	27.57
461	AG-456	144	202.00	6.50	18.00	25.0	150.0	19.0	88.76	54.30
462	AG-457	152	155.00	8.00	15.00	26.7	88.5	23.5	79.02	13.58
463	AG-458	144	176.00	7.00	11.00	31.0	170.0	74.5	69.53	12.64
464	AG-459	119	179.00	5.00	14.00	27.6	170.5	41.5	80.42	40.41
465	AG-460	144	185.20	7.00	20.00	28.0	125.0	44.0	73.96	18.23
466	AG-461	137	195.00	5.00	13.00	33.8	158.0	20.0	88.76	50.28
467	AG-462	143	205.00	6.00	12.00	29.2	141.0	121.5	53.71	80.13
468	AG-463	139	194.00	5.00	21.00	29.7	244.5	36.5	87.01	59.41
469	AG-464	143	149.10	4.50	11.00	27.3	108.5	32.0	77.22	43.22
470	AG-465	144	179.10	5.00	19.00	24.7	117.0	58.0	66.86	58.04
471	AG-466	144	124.00	7.00	10.00	26.6	133.0	13.5	90.78	21.47
472	AG-467	144	181.20	7.00	12.00	27.0	224.0	53.5	80.72	43.65
473	AG-468	136	173.00	6.00	13.00	27.3	169.5	65.0	72.28	11.36
474	AG-469	132	156.30	4.50	19.00	29.4	223.5	11.5	95.11	68.03
475	AG-470	148	153.00	5.00	21.00	26.5	111.0	63.5	63.61	20.18
476	AG-471	136	177.50	6.00	17.00	32.6	239.5	70.5	77.26	74.68
477	AG-472	138	204.60	4.00	14.00	30.6	132.5	10.5	92.66	33.69
478	AG-473	137	201.00	5.50	22.00	26.6	196.5	25.0	88.71	68.86
479	AG-474	138	175.20	3.50	19.00	27.0	91.0	5.5	94.30	24.34
480	AG-475	143	199.00	5.00	16.00	25.2	118.0	26.5	81.66	49.93
481	AG-476	134	152.60	7.00	19.00	26.7	202.0	20.0	90.99	43.95
482	AG-477	137	174.60	7.50	17.00	27.7	101.5	14.5	87.50	34.13
483	AG-478	137	194.60	7.00	11.00	38.5	162.0	76.0	68.07	40.65
484	AG-479	141	156.00	6.00	13.00	27.5	100.5	57.5	63.61	41.95
485	AG-480	134	166.00	8.00	15.00	27.7	114.0	33.5	77.29	49.62
486	AG-481	137	188.20	8.50	17.00	31.8	227.0	24.5	90.26	63.15
487	AG-482	138	210.00	6.00	19.00	28.4	158.0	51.0	75.60	73.06
488	AG-483	135	199.20	7.50	16.00	30.5	125.0	39.5	75.99	59.45
489	AG-484	138	153.00	8.00	15.00	26.0	208.0	43.5	82.70	53.83
490	AG-485	131	193.10	9.00	14.00	35.6	78.5	36.5	68.26	43.63
491	AG-486	137	167.40	7.50	13.00	23.5	131.0	12.0	91.61	67.63
492	AG-487	139	175.00	8.00	16.00	30.0	196.0	26.0	88.29	86.95
493	AG-488	138	189.00	8.00	19.00	26.7	197.5	21.0	90.39	91.17
494	AG-489	138	165.70	7.00	22.00	27.6	170.5	8.0	95.52	61.48
495	AG-490	138	182.60	8.00	14.00	28.7	175.5	35.0	83.37	55.85
496	AG-491	137	168.70	7.00	22.00	31.6	127.5	11.0	92.06	66.24
497	AG-492	139	177.00	8.00	23.00	31.0	145.0	13.5	91.48	57.04
498	AG-493	139	162.00	7.00	14.00	31.2	146.5	16.0	90.15	32.87
499	AG-494	137	174.00	8.50	17.00	26.7	230.5	74.0	75.70	52.59
500	AG-495	148	178.20	7.50	14.00	28.7	104.0	20.5	83.53	36.34
501	AG-496	138	177.20	7.00	21.00	31.7	102.5	83.5	55.11	58.23
502	AG-497	137	182.00	6.50	17.00	29.0	103.5	18.0	85.19	36.88
503	AG-498	138	182.20	5.50	21.00	24.0	99.5	31.5	75.95	32.68
504	AG-499	139	167.50	8.00	14.00	33.0	186.5	26.0	87.76	37.20
505	AG-500	136	205.00	8.50	17.00	29.8	92.0	38.0	70.77	35.49
506	AG-501	139	179.20	8.00	16.00	28.3	168.5	14.5	92.08	55.72
507	AG-502	138	147.00	7.00	10.00	25.0	98.5	12.5	88.74	16.52
508	AG-503	137	173.00	9.00	11.00	27.0	107.0	5.5	95.11	54.28
509	AG-504	141	196.00	8.00	20.00	28.6	113.5	23.0	83.15	36.62
510	AG-505	134	168.00	7.50	16.00	24.0	55.5	26.0	68.10	26.60

511	AG-506	138	185.40	9.00	11.00	25.5	137.5	17.5	88.71	14.88
512	AG-507	139	176.10	7.20	16.00	32.0	85.0	36.5	69.96	45.50
513	AG-508	134	196.00	8.00	18.00	28.4	100.5	81.5	55.22	33.65
514	AG-509	137	170.20	6.70	21.00	30.5	126.0	46.0	73.26	21.59
515	AG-510	138	184.60	8.00	15.00	27.7	143.5	10.0	93.49	36.52
516	AG-511	139	174.70	8.00	14.00	27.5	124.5	4.5	96.51	44.71
517	AG-512	136	214.00	9.00	19.00	32.0	105.5	61.0	63.36	22.93
518	AG-513	144	157.20	8.00	18.00	26.5	119.5	17.5	87.23	20.23
519	AG-514	139	169.10	9.00	17.00	34.0	230.5	28.5	89.00	33.08
520	AG-515	137	187.40	8.00	14.00	31.6	95.0	57.5	62.30	36.99
521	AG-516	148	169.50	8.50	13.00	28.8	177.0	47.0	79.02	35.47
522	AG-517	136	167.70	7.50	20.00	26.7	227.0	51.5	81.51	14.33
523	AG-518	138	179.00	8.20	19.00	24.7	105.5	67.5	60.98	5.16
524	AG-519	139	148.00	7.20	18.00	25.0	224.5	16.0	93.35	12.05
525	AG-520	140	191.00	9.00	8.00	31.3	172.0	24.0	87.76	46.29
526	AG-521	144	163.20	6.50	15.00	25.6	147.0	17.0	89.63	26.78
527	AG-522	139	158.00	8.00	15.00	27.7	155.0	82.0	65.40	14.74
528	AG-523	139	169.00	8.80	14.00	24.9	115.5	18.0	86.52	31.62
529	AG-524	137	193.10	8.80	10.00	26.8	158.0	16.5	90.54	20.10
530	AG-525	138	168.70	7.00	16.00	33.4	90.5	54.5	62.41	36.78
531	AG-526	136	174.50	7.50	13.00	32.3	163.0	18.0	90.06	73.47
532	AG-527	137	194.00	8.00	12.00	33.0	111.0	37.0	75.00	36.74
533	AG-528	137	211.50	8.00	19.00	29.3	119.0	51.0	70.00	17.67
534	AG-529	133	212.00	7.00	14.00	26.2	85.0	31.5	72.96	35.31
535	AG-530	132	151.70	10.00	11.00	33.0	167.5	102.0	62.15	52.99
536	AG-531	131	174.50	7.50	8.00	27.4	125.5	4.5	96.54	41.13
537	AG-532	134	202.50	9.00	20.00	31.0	193.5	28.0	87.36	52.88
538	AG-533	131	275.00	7.50	14.00	29.6	145.0	62.5	69.88	48.21
539	AG-534	132	184.00	7.00	9.00	32.0	152.5	51.0	74.94	27.52
540	AG-535	131	203.00	7.00	11.00	28.3	144.0	20.5	87.54	41.84
541	AG-536	136	264.50	9.00	13.00	31.3	117.5	23.5	83.33	35.10
542	AG-537	138	171.00	8.00	17.00	28.4	99.0	22.5	81.48	32.67
543	AG-538	134	180.00	9.00	18.00	28.9	152.5	16.5	90.24	70.87
544	AG-539	130	202.50	8.00	16.00	28.8	103.5	37.0	73.67	19.59
545	AG-540	139	190.00	7.50	16.00	31.5	158.5	46.5	77.32	53.94
546	AG-541	134	153.50	6.00	11.00	26.1	150.5	9.0	94.36	45.09
547	AG-542	137	169.50	7.50	16.00	24.7	95.0	18.0	84.07	40.70
548	AG-543	137	184.60	8.00	18.00	27.7	155.5	13.5	92.01	45.86
549	AG-544	134	191.50	8.00	15.00	26.9	195.5	39.5	83.19	29.77
550	AG-545	143	164.00	8.00	16.00	28.5	64.0	41.5	60.66	50.99
551	AG-546	144	175.00	9.50	12.00	30.3	270.5	65.0	80.63	54.06
552	AG-547	140	138.70	7.20	15.00	24.0	58.5	29.5	66.48	9.90
553	AG-548	139	170.00	7.50	8.00	28.5	148.5	35.5	80.71	49.83
554	AG-549	136	192.50	7.50	8.00	28.0	178.5	28.5	86.23	44.67
555	AG-550	131	192.00	8.00	9.00	28.6	138.0	26.5	83.89	27.30
556	AG-551	134	183.50	9.00	13.00	27.8	138.0	19.0	87.90	37.37
557	AG-552	144	162.00	8.50	16.00	29.3	270.5	97.0	73.61	44.17
558	AG-553	144	178.60	8.50	13.00	28.0	240.5	40.5	85.59	71.48
559	AG-554	137	181.50	6.80	13.00	27.0	106.0	40.5	72.35	12.02
560	AG-555	134	167.00	5.50	18.00	25.5	172.5	34.5	83.33	83.62
561	AG-556	141	185.00	7.00	23.00	29.7	189.5	31.0	85.94	35.16
562	AG-557	142	135.10	6.50	26.00	29.3	107.5	51.0	67.82	27.66
563	AG-558	130	179.40	7.50	12.00	32.5	146.0	36.0	80.22	37.49
564	AG-559	131	184.00	5.50	18.00	31.5	232.0	29.5	88.72	27.01
565	AG-560	132	185.60	6.70	19.00	33.5	193.5	30.5	86.38	26.78
566	AG-561	130	183.60	7.00	22.00	23.7	81.5	25.0	76.53	36.39
567	AG-562	134	116.00	7.00	19.00	26.5	160.5	21.0	88.43	44.52
568	AG-563	131	182.30	6.90	5.00	32.0	200.5	28.5	87.55	29.91
569	AG-564	119	174.00	7.00	12.00	29.4	81.0	13.5	85.71	22.31
570	AG-565	134	176.50	8.20	15.00	32.5	190.5	20.5	90.28	40.79
571	AG-566	136	205.00	9.00	13.00	28.2	148.0	27.5	84.33	59.46

572	AG-567	141	163.00	8.20	13.00	25.8	110.5	19.5	85.00	24.67
573	AG-568	132	120.00	7.00	9.00	16.8	41.5	4.5	90.22	4.59
574	AG-569	139	149.00	6.50	26.00	25.2	115.5	13.0	89.88	38.64

Where, (FDF – days to 50% flowering, PH – Plant height (cm), SGT – Stem thickness (mm), NPH - Number of panicles/ hill, PL – Panicle length (cm), NGP - Number of filled grains/Panicle, NCP - Number of chaffs/ panicle, SFP - Spikelet fertility (%) and GYP - Grain yield/ plant (g))

Table 3 — Description of qualitative traits in <i>asra</i> rice accessions as per IRRI <sup>14</sup>										
Qualitative Characters	1. Basal sheath colour	2. Intensity of green colour in leaf	3. Anthocyanin colouration of leaf blade	4. Anthocyanin colouration of leaf sheath	5. Intensity of anthocyanin colouration in leaf sheath	6. Leaf pubescence	7. Leaf auricles	8. Anthocyanin colouration of auricles	9. Leaf collar	10. Anthocyanin colouration of collar
Abbreviations	bsc	igc	aclb	acls	iacl	lp	la	aca	lc	acc
Codes	1=Green 2=Light Purple 3=Purple lines 4=Purple	1=Light 2=Medium 3=Dark	1=Light Green 2=Green 3=Dark Green 4=Purple 5=Purple Margins 6=Purple Blotch 7=Purple	1=Absent 2=Present	1=Very weak 2=Weak 3=Medium 4=Strong	1=Absent 2=Weak 3=Medium 4=Strong 5=Very Strong	1=Absent 2=Present	1=Colorless 2=Light Purple 3=Purple	1=Absent 2=Present	1=Absent 2=Present
Qualitative Characters	11. Shape of ligule	12. Colour of ligule	13. Culm attitude	14. Attitude of flag leaf blade	15. Colour of stigma	16. Distribution of awns on panicles	17. Panicle exertion	18. Lemma & palea colour		
Abbreviations	sl	cl	ca	Aflb	cs	dap	pe	lpc		
Codes	1=Truncate 2=Acute 3=Split	1=White 2=Light Purple 3=Purple	1=Erect 2=Semi Erect 3=Open 4=Spreading	1=Erect 2=Semi Erect 3=Horizontal 4=Drooping	1=White 2=Light Green 3=Yellow 4=Light Purple 5=Purple	1=Tip only 2=Upper half only 3=Whole length	1=Partly exerted 2=Mostly exerted 3=Well exerted	1=Straw 2=Gold & gold furrows on straw background 3=Brown spots on straw 4=Brown furrows on straw 5=Brown (tawny) 6=Reddish to light purple 7=Purple spots/furrows on		



straw  
8=Purple  
9=Black

Table 4 — Qualitative traits data recorded among 569 *asra* rice accessions along with 5 checks

Sl. No.	Treatment	bsc	igc	aclb	acls	iacl	lp	la	ac	lc	ac	sl	cl	ca	Aflb	cs	da	pe	lpc	
		a c														P				
1	Badal (Check-1)	1	3	2	1	4	4	2	2	1	1	2	2	1	1	1	1	1	3	1
2	IET-21858 (Check-2)	1	3	3	1	5	4	2	1	2	1	2	1	1	1	1	2	3	3	2
3	MSE-9 (Check-3)	1	2	2	1	2	2	2	1	2	1	2	2	1	1	1	1	1	2	1
4	Manoharsali (Check-4)	1	2	2	1	3	3	2	2	2	2	2	2	2	1	1	1	2	1	
5	Maguri Bao (Check-5)	2	1	7	1	1	3	2	2	2	1	2	2	4	1	1	1	3	1	
6	AG-1	2	2	2	1	1	3	2	1	2	1	3	1	1	1	1	1	1	9	
7	AG-2	1	2	2	1	1	3	2	1	2	1	2	1	1	1	1	1	3	1	
8	AG-3	2	2	2	1	1	3	2	1	2	1	2	1	2	1	1	1	1	4	
9	AG-4	1	2	2	1	1	3	2	1	2	1	3	1	1	2	1	1	3	8	
10	AG-5	1	2	2	1	1	4	2	1	2	1	2	1	4	3	1	2	3	8	
11	AG-6	1	2	2	1	1	3	1	1	2	1	2	1	4	3	1	1	3	4	
12	AG-7	1	1	2	1	1	4	2	1	2	1	2	1	4	1	1	3	3	2	
13	AG-8	1	2	4	1	1	4	1	1	2	1	2	1	1	2	2	3	3	9	
14	AG-9	1	1	2	1	1	4	2	1	2	1	2	1	1	2	1	1	3	8	
15	AG-10	1	1	2	1	1	2	2	1	2	1	2	1	1	1	1	1	1	1	
16	AG-11	2	2	2	1	1	4	2	1	2	1	2	1	1	1	1	1	3	1	
17	AG-12	2	2	2	1	1	3	2	1	2	1	3	1	1	1	1	1	3	1	
18	AG-13	1	2	2	1	1	3	2	1	1	1	3	1	1	1	1	1	1	9	
19	AG-14	2	2	2	1	1	3	2	1	2	1	3	1	1	1	1	1	1	9	
20	AG-15	2	3	3	1	1	3	2	1	2	1	3	1	1	1	1	1	3	1	
21	AG-16	3	3	5	1	1	3	2	1	1	1	2	1	1	1	1	1	3	4	
22	AG-17	2	2	1	1	3	4	1	1	1	1	3	1	1	1	1	3	3	1	
23	AG-18	2	3	2	1	1	3	2	1	1	1	3	1	1	2	1	1	3	1	
24	AG-19	3	3	4	2	3	3	2	1	1	1	3	1	1	1	1	1	3	4	
25	AG-20	2	2	2	1	1	3	2	1	1	1	3	1	2	3	2	3	3	5	
26	AG-21	2	2	1	2	3	3	2	1	2	1	3	1	1	1	1	1	3	1	
27	AG-22	2	3	3	2	3	3	2	1	1	1	3	1	1	1	1	1	1	8	
28	AG-23	1	2	2	1	1	4	2	1	2	1	3	1	1	1	1	1	3	1	
29	AG-24	1	3	2	1	1	3	2	1	2	1	3	1	1	1	1	1	1	1	
30	AG-25	2	3	2	1	1	3	2	1	2	1	3	1	2	3	1	1	3	1	
31	AG-26	1	2	2	1	1	3	2	1	2	1	3	1	2	3	1	2	2	4	
32	AG-27	2	2	2	1	1	3	2	1	2	1	3	1	1	1	1	1	3	2	
33	AG-28	2	2	2	1	1	3	2	1	2	1	3	1	1	2	1	1	3	5	
34	AG-29	2	2	2	1	1	3	2	1	2	1	3	1	1	1	1	1	3	4	
35	AG-30	1	2	2	2	4	3	2	1	2	1	3	1	1	1	1	2	3	1	
36	AG-31	1	2	2	2	3	3	2	1	2	1	3	1	1	1	1	1	3	1	
37	AG-32	2	2	2	2	3	3	2	1	2	1	3	1	1	1	2	1	3	2	
38	AG-33	1	2	2	2	4	4	2	1	2	1	3	1	1	1	2	1	3	5	
39	AG-34	2	1	1	1	1	3	2	1	2	1	3	1	1	1	2	1	3	4	
40	AG-35	2	1	1	1	1	3	2	1	2	1	3	1	1	1	2	2	3	4	
41	AG-36	1	1	1	1	1	2	2	1	2	1	3	1	1	2	2	3	2	4	
42	AG-37	1	1	1	1	1	2	2	1	2	1	3	1	1	1	2	2	3	3	
43	AG-38	1	1	1	1	1	2	2	2	2	1	3	2	1	2	2	1	3	9	
44	AG-39	1	2	2	1	1	3	2	2	2	1	3	2	1	1	2	1	3	8	
45	AG-40	1	2	2	1	1	3	2	1	2	1	3	1	1	1	1	3	3	1	
46	AG-41	1	2	2	1	1	3	2	1	2	1	3	1	1	2	1	2	3	7	
47	AG-42	1	2	2	1	1	3	2	1	2	1	3	1	1	1	1	2	2	1	
48	AG-43	1	2	2	1	1	3	1	1	2	1	3	1	1	1	1	1	3	1	
49	AG-44	1	1	1	1	1	2	2	1	2	1	3	1	1	1	1	2	3	1	

50	AG-45	2	3	3	1	1	3	2	1	2	1	3	1	1	1	2	1	3	9
51	AG-46	1	2	2	1	1	3	2	2	2	1	3	1	1	2	2	1	3	5
52	AG-47	1	2	2	1	1	2	2	1	2	1	3	1	2	3	1	2	3	2
53	AG-48	1	2	2	2	3	3	2	1	2	1	3	1	2	3	1	1	3	3
54	AG-49	1	1	1	1	1	3	2	1	2	1	3	1	2	2	2	3	3	3
55	AG-50	1	2	2	1	1	3	2	1	2	1	3	1	1	1	1	2	3	8
56	AG-51	1	2	2	1	1	3	2	2	2	1	2	1	1	1	1	2	2	4
57	AG-52	1	2	2	1	1	3	2	2	2	1	2	1	1	1	1	1	3	4
58	AG-53	2	2	2	1	1	2	2	1	2	1	2	1	4	3	1	2	3	3
59	AG-54	3	2	2	1	1	3	2	3	2	1	2	2	1	1	1	1	3	4
60	AG-55	4	2	4	1	1	4	1	1	2	2	2	2	1	1	1	1	3	9
61	AG-56	1	2	2	1	1	2	2	1	2	1	2	1	4	3	1	2	3	4
62	AG-57	2	2	2	1	1	2	2	3	2	2	2	1	4	1	1	2	3	1
63	AG-58	1	2	2	1	1	2	2	2	2	1	2	1	4	3	1	2	3	9
64	AG-59	1	2	2	1	1	3	2	1	2	2	2	2	1	1	1	2	3	4
65	AG-60	1	2	2	1	1	3	2	1	2	1	2	1	4	3	1	3	3	8
66	AG-61	2	2	4	1	1	3	2	2	2	2	2	1	1	1	1	1	3	9
67	AG-62	1	2	2	1	1	3	1	1	2	1	2	1	1	2	1	3	3	9
68	AG-63	1	2	2	1	1	3	2	1	2	1	2	1	1	1	1	1	2	1
69	AG-64	1	2	2	1	1	2	2	1	2	1	2	1	1	1	1	1	3	9
70	AG-65	1	2	2	1	1	2	2	1	2	1	2	1	1	1	1	1	3	1
71	AG-66	2	2	2	2	2	2	2	1	2	1	2	1	4	1	1	1	3	1
72	AG-67	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	1	3	8
73	AG-68	3	2	2	2	1	2	2	1	2	1	2	1	4	1	1	2	3	8
74	AG-69	3	2	2	1	1	2	2	1	2	1	2	1	4	1	1	2	3	9
75	AG-70	3	2	2	1	1	2	2	1	2	1	2	1	4	1	1	2	3	8
76	AG-71	3	2	2	1	1	2	2	1	2	1	2	1	4	1	1	2	3	4
77	AG-72	3	2	5	1	1	3	2	1	2	1	2	1	4	1	1	2	3	1
78	AG-73	1	2	2	1	1	4	2	1	2	1	2	1	4	1	1	1	3	1
79	AG-74	3	2	2	2	2	4	2	1	2	2	2	1	4	1	1	1	3	1
80	AG-75	1	2	2	1	1	2	2	1	2	1	2	1	4	1	1	2	3	3
81	AG-76	1	2	2	2	3	3	2	1	2	1	3	1	2	3	1	2	3	3
82	AG-77	1	2	2	2	3	3	2	1	2	1	3	2	2	2	1	3	3	2
83	AG-78	1	2	2	2	3	3	2	1	2	1	3	1	2	3	1	1	2	2
84	AG-79	1	2	2	2	3	3	2	1	2	1	3	1	2	3	1	1	3	3
85	AG-80	3	3	3	2	2	2	2	1	2	1	3	2	1	1	2	1	3	9
86	AG-81	1	1	1	2	3	2	2	1	2	1	3	1	1	1	1	1	3	7
87	AG-82	1	1	1	2	3	3	1	1	2	1	3	2	1	2	2	1	3	7
88	AG-83	1	2	2	2	3	3	2	1	2	1	3	3	1	2	2	1	3	9
89	AG-84	1	2	3	2	3	3	2	1	2	1	3	2	1	3	3	1	3	8
90	AG-85	1	2	2	1	1	2	2	1	2	1	3	1	2	2	2	1	3	4
91	AG-86	2	2	3	1	1	2	2	2	2	1	3	2	1	1	2	1	3	1
92	AG-87	1	2	2	2	3	3	2	1	2	1	3	2	2	1	2	3	3	9
93	AG-88	1	2	2	2	3	3	2	1	2	1	3	1	1	1	1	1	3	3
94	AG-89	1	1	1	2	3	3	2	1	2	1	3	1	2	1	2	1	3	5
95	AG-90	1	1	2	2	3	3	2	1	2	1	3	2	2	1	1	1	3	3
96	AG-91	1	2	2	2	3	3	2	1	2	1	3	1	2	1	1	2	3	1
97	AG-92	2	1	1	2	3	3	2	1	2	1	3	1	2	1	4	1	3	8
98	AG-93	1	2	2	2	3	3	2	1	2	1	3	1	2	1	1	1	3	2
99	AG-94	3	2	1	2	3	3	2	1	2	1	3	1	2	2	4	1	3	9
100	AG-95	1	2	2	2	3	3	2	1	2	1	3	1	2	1	1	1	3	9
101	AG-96	2	3	3	2	4	4	2	1	2	1	3	2	2	2	4	1	3	9
102	AG-97	1	2	2	2	3	3	2	1	2	1	3	1	2	1	1	1	3	8
103	AG-98	1	2	2	2	3	3	2	1	2	1	3	1	1	3	1	1	3	1
104	AG-99	3	3	5	2	3	3	2	1	2	1	3	2	2	2	4	1	3	8
105	AG-100	1	2	2	2	3	3	2	1	2	1	3	2	2	1	1	1	2	7
106	AG-101	1	3	3	1	1	4	2	1	2	1	2	1	4	3	1	1	3	8
107	AG-102	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	5
108	AG-103	3	2	4	1	1	4	2	2	2	1	2	2	4	1	1	1	3	9
109	AG-104	1	2	2	1	1	4	2	1	2	1	2	1	4	3	1	1	3	8
110	AG-105	1	2	2	1	1	4	2	1	2	1	2	1	3	3	1	1	3	1

111	AG-106	1	2	2	1	1	5	2	1	2	1	2	1	4	1	1	1	3	1
112	AG-107	3	2	2	1	1	4	2	1	2	1	2	1	4	1	1	1	3	2
113	AG-108	1	2	2	1	1	5	2	1	2	1	2	1	4	1	1	1	3	1
114	AG-109	1	2	2	1	1	2	2	1	2	1	2	1	4	1	1	1	1	3
115	AG-110	3	2	4	1	1	4	2	1	2	1	2	1	4	3	1	1	3	1
116	AG-111	3	2	4	1	1	4	2	1	2	1	2	1	4	3	1	1	3	1
117	AG-112	2	1	2	1	1	4	2	1	2	1	2	1	4	1	1	1	3	1
118	AG-113	1	2	2	1	1	2	2	1	2	1	2	1	4	3	1	1	3	5
119	AG-114	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	2
120	AG-115	1	2	2	2	2	2	2	1	2	1	2	1	4	3	1	1	3	9
121	AG-116	1	2	2	2	3	2	2	1	2	1	2	1	4	2	1	1	3	9
122	AG-117	1	2	2	1	1	4	2	1	2	1	2	1	4	1	1	1	2	1
123	AG-118	3	2	2	2	2	3	2	1	2	1	2	1	4	1	1	1	1	9
124	AG-119	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	1	1
125	AG-120	2	2	5	1	1	5	2	1	2	1	2	1	2	4	1	1	3	1
126	AG-121	1	1	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	9
127	AG-122	3	2	2	1	1	4	2	1	2	1	2	1	4	4	1	1	2	1
128	AG-123	3	2	2	1	1	3	2	1	2	1	2	1	3	2	1	1	2	1
129	AG-124	1	1	2	1	1	2	2	1	2	1	2	1	3	3	1	1	3	4
130	AG-125	2	1	2	1	1	2	2	1	2	1	2	1	1	1	1	1	3	9
131	AG-126	1	2	2	1	1	2	2	1	2	1	2	1	4	3	1	1	3	8
132	AG-127	1	2	2	1	1	2	2	1	2	1	2	1	4	3	1	1	1	9
133	AG-128	2	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	1	1
134	AG-129	1	2	2	1	1	4	2	1	2	1	2	1	4	3	1	2	3	3
135	AG-130	3	1	2	1	1	3	2	1	2	2	2	1	4	4	1	1	1	5
136	AG-131	2	2	2	1	1	3	2	1	2	1	2	1	4	4	1	1	1	9
137	AG-132	1	2	2	1	1	4	2	1	2	1	2	1	3	1	1	1	3	9
138	AG-133	3	2	2	1	1	2	2	1	2	1	2	1	4	1	1	1	1	9
139	AG-134	1	1	2	1	1	4	2	1	2	1	2	1	4	2	1	1	2	9
140	AG-135	1	2	2	1	1	3	2	1	2	1	2	1	3	2	1	1	3	2
141	AG-136	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	2	2	9
142	AG-137	3	2	2	1	1	4	2	1	2	1	2	1	1	1	1	1	3	1
143	AG-138	1	2	2	1	1	4	2	1	2	1	2	1	3	1	1	1	3	1
144	AG-139	1	2	2	1	1	3	2	1	2	1	2	1	3	1	1	1	3	9
145	AG-140	1	2	2	2	2	2	2	1	2	1	2	1	4	4	1	1	1	8
146	AG-141	1	2	2	1	1	4	2	1	2	1	2	1	4	4	1	1	1	9
147	AG-142	1	2	2	1	1	2	2	1	2	1	2	1	4	4	1	1	1	1
148	AG-143	3	1	2	2	2	5	2	1	2	1	2	1	4	1	1	1	3	9
149	AG-144	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	6
150	AG-145	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	9
151	AG-146	3	2	5	2	2	5	2	1	2	1	2	1	3	1	1	1	3	6
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253	AG-248	1	1	2	1	1	5	2	1	2	1	2	1	4	1	1	1	3	1
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340	AG-335	1	2	2	1	3	3	2	1	2	1	3	2	2	3	1	1	3	1
341	AG-336	1	2	2	1	3	3	2	1	2	1	3	1	1	4	1	1	3	1
342	AG-337	1	2	2	1	1	1	2	1	2	1	3	1	2	4	1	1	2	5
343	AG-338	1	2	2	1	3	3	2	1	2	1	3	1	4	3	1	1	3	1
344	AG-339	1	2	2	1	3	3	2	1	2	1	3	1	1	3	1	1	2	1
345	AG-340	1	2	2	1	4	4	2	1	2	1	3	1	1	1	1	1	3	1
346	AG-341	1	2	2	1	4	4	2	1	2	1	3	1	3	3	1	1	2	1
347	AG-342	4	3	5	1	2	2	2	2	2	1	3	2	4	1	4	1	2	1
348	AG-343	1	2	2	1	4	4	2	1	2	1	3	1	1	3	1	1	3	1
349	AG-344	1	2	2	1	3	3	2	1	2	1	3	1	2	3	1	1	3	1
350	AG-345	1	2	2	1	3	3	2	1	2	1	3	1	2	3	1	1	3	1
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352	AG-347	3	3	3	1	1	1	2	3	2	1	3	3	4	1	4	1	3	1
353	AG-348	1	2	2	1	1	1	2	1	2	1	3	1	3	2	1	1	3	1
354	AG-349	1	2	2	1	3	3	2	1	2	1	3	1	2	2	1	1	3	1

355	AG-350	1	1	1	1	3	3	2	1	2	1	3	1	2	2	1	1	3	1
356	AG-351	1	2	2	1	1	5	2	1	2	1	2	1	3	3	1	1	3	1
357	AG-352	1	2	2	1	1	3	2	1	2	1	2	1	3	3	1	1	3	1
358	AG-353	1	2	2	1	1	3	2	1	2	1	2	1	3	4	1	1	3	1
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361	AG-356	1	2	2	1	1	4	2	1	2	1	2	1	2	2	2	1	3	2
362	AG-357	1	1	1	1	1	5	2	1	2	1	2	1	4	1	1	3	3	1
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364	AG-359	1	1	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	6
365	AG-360	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	1	3	1
366	AG-361	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	3	3	1
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370	AG-365	1	1	1	1	1	4	2	1	2	1	2	1	4	2	1	1	3	1
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372	AG-367	1	2	2	1	1	4	2	1	2	1	2	1	2	3	1	1	1	1
373	AG-368	1	2	2	1	1	4	2	1	2	1	2	1	3	3	2	1	3	1
374	AG-369	1	2	2	1	1	4	2	1	2	1	2	1	2	3	1	1	3	1
375	AG-370	1	2	2	1	1	4	2	1	2	1	2	1	4	1	1	1	1	1
376	AG-371	1	2	2	1	1	3	2	1	2	1	2	1	2	1	1	1	3	1
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379	AG-374	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	6
380	AG-375	3	2	2	1	1	5	2	1	2	2	2	1	3	1	1	1	3	1
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387	AG-382	1	2	2	1	1	4	2	1	2	1	2	1	3	3	1	1	3	1
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392	AG-387	1	2	2	1	1	2	2	1	2	1	2	1	3	1	1	1	1	1
393	AG-388	3	2	2	1	1	5	2	1	2	1	2	1	4	2	1	1	3	1
394	AG-389	1	2	2	1	1	3	2	1	2	1	2	1	4	3	3	3	3	8
395	AG-390	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	1
396	AG-391	1	2	2	1	1	5	2	1	2	1	2	1	4	3	1	3	3	1
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401	AG-396	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	1	3	9
402	AG-397	1	2	2	1	1	5	2	1	2	1	2	1	4	3	2	1	2	9
403	AG-398	1	2	2	1	1	1	2	1	2	1	2	2	4	3	2	1	2	1
404	AG-399	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	1	3	7
405	AG-400	1	2	2	1	1	3	2	1	2	1	2	1	4	3	1	2	3	1
406	AG-401	1	2	2	1	1	3	2	1	2	1	1	1	4	3	1	2	3	1
407	AG-402	1	2	2	1	1	3	2	1	2	1	1	1	2	4	1	1	3	1
408	AG-403	1	2	2	1	1	4	2	1	2	1	1	1	4	4	1	3	3	1
409	AG-404	1	2	2	1	1	2	2	1	2	1	1	1	3	4	1	1	3	1
410	AG-405	1	2	2	1	1	3	2	1	2	1	2	1	2	2	1	1	3	1
411	AG-406	1	2	2	1	1	3	2	1	2	1	2	1	2	1	1	1	3	1
412	AG-407	1	2	2	1	1	3	2	1	2	1	2	1	2	1	1	1	2	1
413	AG-408	1	2	2	1	1	5	2	1	2	1	2	1	2	1	1	1	1	1
414	AG-409	1	2	2	1	1	4	2	1	2	1	2	1	1	1	1	1	3	1
415	AG-410	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	2	3	1

416	AG-411	1	2	2	1	1	4	2	1	2	1	2	2	1	1	3	1		
417	AG-412	1	2	2	1	1	3	2	1	2	1	2	1	4	4	2	1	3	1
418	AG-413	1	2	2	1	1	4	2	1	2	1	2	1	2	2	1	2	3	1
419	AG-414	1	2	2	1	1	4	2	1	2	1	2	1	4	3	1	1	3	1
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425	AG-420	3	2	2	1	1	3	2	1	2	1	2	1	2	3	1	1	3	1
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427	AG-422	1	2	2	1	1	2	2	1	2	1	2	1	4	2	1	1	3	8
428	AG-423	1	2	2	1	1	4	2	1	2	1	2	1	2	2	1	2	3	1
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432	AG-427	1	2	2	1	1	5	2	1	2	1	2	1	4	1	1	1	3	1
433	AG-428	1	2	2	1	1	3	2	1	2	1	2	1	3	3	1	2	3	1
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435	AG-430	1	1	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	9
436	AG-431	1	2	2	1	1	5	2	1	2	1	2	1	4	1	1	1	3	1
437	AG-432	1	3	3	1	1	3	2	1	2	1	2	1	2	1	2	1	3	1
438	AG-433	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	1	3	1
439	AG-434	1	2	2	1	1	5	2	1	2	1	2	1	3	1	1	1	3	1
440	AG-435	1	2	2	1	1	3	2	1	2	1	2	1	4	2	2	2	3	6
441	AG-436	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	2	3	1
442	AG-437	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	2	3	1
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449	AG-444	1	1	1	1	1	4	2	1	2	1	2	1	4	2	1	2	3	1
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452	AG-447	1	2	2	1	1	4	2	1	2	1	2	1	3	1	1	1	3	7
453	AG-448	1	2	2	1	1	5	2	1	2	1	2	1	4	2	2	1	1	7
454	AG-449	3	1	2	1	1	5	2	2	2	2	2	2	4	2	1	1	3	1
455	AG-450	1	2	2	1	1	5	2	1	2	1	2	1	4	2	2	1	3	7
456	AG-451	1	2	2	1	1	2	2	1	2	1	2	1	2	2	1	1	3	9
457	AG-452	1	2	2	1	1	2	2	1	2	1	2	1	4	2	1	1	3	6
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459	AG-454	1	2	2	1	1	3	2	1	2	1	2	1	4	3	1	1	3	9
460	AG-455	1	2	2	1	1	3	2	1	2	1	2	1	2	3	1	2	3	1
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462	AG-457	1	2	2	1	1	4	2	1	2	1	2	1	1	1	1	1	3	1
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466	AG-461	1	2	2	1	1	3	2	1	2	1	2	1	2	3	1	1	3	1
467	AG-462	1	1	2	2	2	3	2	1	2	1	2	1	3	2	1	3	3	1
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469	AG-464	1	2	2	1	1	4	2	1	2	1	2	1	3	4	1	3	3	1
470	AG-465	1	1	2	1	1	3	2	1	2	1	1	1	4	2	1	2	3	1
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473	AG-468	2	1	7	1	1	3	2	2	2	1	2	2	4	1	1	1	3	1
474	AG-469	1	2	2	1	1	3	2	2	2	1	2	1	2	2	1	1	3	1
475	AG-470	4	1	1	1	1	2	2	2	2	1	1	1	3	3	1	1	3	1
476	AG-471	2	3	3	1	1	4	2	2	2	1	2	1	3	3	1	1	3	1



477	AG-472	1	2	2	1	1	3	2	2	2	1	1	1	3	3	1	1	3	1
478	AG-473	1	2	2	1	1	2	2	2	2	1	1	1	3	2	1	1	3	1
479	AG-474	1	2	2	1	1	2	2	2	2	1	2	1	3	2	1	2	3	1
480	AG-475	1	2	2	1	1	5	2	2	2	1	1	1	3	3	1	3	3	1
481	AG-476	1	2	2	1	1	1	2	1	2	1	2	1	2	2	1	1	3	1
482	AG-477	1	2	2	1	1	4	2	1	2	1	2	1	4	3	1	1	3	2
483	AG-478	4	2	2	1	1	2	2	2	2	2	2	1	4	4	1	1	3	2
484	AG-479	1	2	2	1	1	2	2	1	2	1	2	1	2	1	1	1	3	2
485	AG-480	1	2	2	1	1	5	2	1	2	1	2	1	2	2	1	1	3	1
486	AG-481	1	2	2	1	1	5	2	1	2	1	2	1	2	2	1	1	3	1
487	AG-482	1	2	2	1	1	3	2	1	2	1	2	1	2	2	1	1	3	1
488	AG-483	4	2	2	1	1	5	2	1	2	1	2	1	4	4	1	1	3	9
489	AG-484	1	2	2	1	1	4	2	1	2	1	2	1	2	2	1	1	3	1
490	AG-485	3	3	1	2	5	5	2	1	2	1	2	3	4	4	1	1	3	1
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493	AG-488	3	1	1	2	3	3	2	2	2	1	2	3	3	2	1	1	3	1
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507	AG-502	1	2	2	1	1	3	2	1	2	1	2	1	2	1	1	3	3	3
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511	AG-506	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	1
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520	AG-515	1	2	2	1	1	3	2	1	2	1	2	1	4	3	3	3	3	8
521	AG-516	1	2	2	1	1	3	2	1	2	1	2	1	3	1	1	3	3	1
522	AG-517	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	1	3	1
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524	AG-519	1	2	2	1	1	2	2	1	2	1	2	1	4	1	1	1	3	1
525	AG-520	3	1	2	1	1	5	2	1	2	1	2	1	4	1	1	2	3	1
526	AG-521	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	1
527	AG-522	1	2	2	1	1	2	2	1	2	1	2	1	4	2	2	3	3	1
528	AG-523	3	2	5	1	1	4	2	1	2	2	2	1	4	3	1	1	3	1
529	AG-524	3	1	2	1	1	5	2	1	2	1	2	1	4	2	1	2	3	4
530	AG-525	3	1	2	1	1	5	2	1	2	1	2	1	4	3	1	3	3	1
531	AG-526	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	1
532	AG-527	3	2	2	1	1	5	2	1	2	1	2	1	4	2	2	1	3	9
533	AG-528	3	2	5	1	2	5	2	1	2	2	2	2	4	3	2	1	3	9
534	AG-529	2	1	2	1	1	3	2	1	2	2	2	2	4	2	1	1	3	2
535	AG-530	3	1	5	1	1	4	2	1	2	1	2	1	4	1	1	1	3	2
536	AG-531	1	2	2	1	1	4	2	1	2	1	2	1	4	1	1	1	3	1
537	AG-532	2	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	1

538	AG-533	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	1
539	AG-534	1	2	2	1	1	4	2	1	2	1	2	1	3	1	1	1	3	1
540	AG-535	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	3	3	8
541	AG-536	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	3	3	1
542	AG-537	1	2	2	1	1	5	2	1	2	1	2	1	4	1	1	3	3	1
543	AG-538	1	2	2	1	1	5	2	1	2	1	2	1	4	1	1	1	3	1
544	AG-539	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	2	3	5
545	AG-540	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	6
546	AG-541	1	2	2	1	1	5	2	1	2	1	2	1	2	3	1	1	3	9
547	AG-542	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	1	3	1
548	AG-543	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	1
549	AG-544	1	2	2	1	1	5	2	1	2	1	2	1	4	2	1	1	3	6
550	AG-545	1	2	2	1	1	4	2	1	2	1	2	1	4	2	2	1	3	8
551	AG-546	1	2	2	1	1	5	2	1	2	1	2	1	4	3	1	1	3	1
552	AG-547	1	2	2	1	1	4	2	1	2	1	2	1	4	1	1	1	3	1
553	AG-548	1	1	1	1	1	3	2	1	2	1	2	1	4	2	1	1	3	1
554	AG-549	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	1	3	1
555	AG-550	1	1	1	1	1	5	2	1	2	1	2	1	4	1	2	1	3	1
556	AG-551	1	2	2	1	1	3	2	1	2	1	2	1	4	1	1	1	3	1
557	AG-552	1	2	2	1	1	5	2	1	2	1	2	1	4	2	2	1	3	1
558	AG-553	1	3	3	1	1	5	2	1	2	1	2	1	4	2	2	1	3	1
559	AG-554	1	2	2	1	1	4	2	1	2	1	2	1	4	2	3	3	3	8
560	AG-555	1	2	2	1	1	3	2	1	2	1	2	1	4	1	3	1	3	1
561	AG-556	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	1	3	1
562	AG-557	1	2	2	1	1	4	2	1	2	1	2	1	4	2	1	3	3	1
563	AG-558	1	2	2	1	1	3	2	1	2	1	2	1	4	2	1	3	3	2
564	AG-559	1	2	2	1	1	4	2	1	2	1	2	1	3	3	1	1	3	9
565	AG-560	1	2	2	1	1	5	2	1	2	1	2	1	2	2	1	1	3	2
566	AG-561	1	2	2	1	1	5	2	1	2	1	2	1	3	3	3	1	1	8
567	AG-562	1	2	2	1	1	5	2	1	2	1	2	1	1	1	1	1	3	1
568	AG-563	1	2	2	1	1	3	2	1	2	1	2	1	4	3	1	1	3	8
569	AG-564	3	1	2	1	1	3	2	1	2	1	2	1	3	1	3	3	3	1
570	AG-565	3	2	3	1	1	3	2	1	2	1	2	1	4	1	2	2	2	1
571	AG-566	3	1	2	1	1	4	2	1	2	1	2	1	4	1	1	1	3	8
572	AG-567	1	3	3	1	1	5	2	1	2	1	2	1	1	1	1	1	3	2
573	AG-568	1	2	2	1	1	3	2	1	2	1	2	1	1	1	1	1	3	8
574	AG-569	1	1	1	1	1	2	2	1	2	1	2	1	4	1	1	1	3	8

Table 5 — Cluster composition of nine quantitative traits in 569 *asra* rice germplasm

Sl. No.	Cluster Name	No. of germplasm out of 574 including 5 checks	Name of Genotypes
1.	Cluster-I	190	AG-(2,3,4, 7,9, 10, 18,19, 22,26, 29, 30,34, 37,39, 41,43, 48, 65,67, 70,72,73,84,90,92,93,99,100,102,103,104, 106,107,109,117,119,121,122,124, 126, 152, 167, 174, 176, 179, 187, 189, 190, 191, 195, 202, 210,215,218, 220, 221, 223, 224, 230, 233, 234, 237, 238, 245, 250, 252, 253,258,261, 263, 265, 266, 268, 269, 270, 273, 279, 280, 282, 284, 287, 291,294,295, 296, 297, 298, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311,315,316, 317, 318, 319, 322, 325, 334, 335, 336, 339, 340, 341, 344, 345,347, 348,350,351,352,353,355,360,361,362,367,370,371,372,375,376,377,381, 383, 386, 388, 394, 397, 398, 399, 400, 401, 404, 414, 416, 418,419,420, 421, 422, 424, 426, 427, 434, 444, 446, 447, 449, 450, 460, 464,469,471, 474, 477, 479, 480, 482, 502, 503, 507, 510, 514, 516, 518, 524,526,528, 536, 542, 546, 547, 552, 560, 562, 566,567,569, 572, 573, 574)
2.	Cluster-II	254	AG-(1,6,12,15,14,16,17,20,21,23,24,25,27,28,31,32,33,38,40,42,44,46, 47, 49, 52, 53,54, 55, 56, 57, 58,59, 60, 61,62, 63, 64,66, 69, 74, 75,76,77, 78, 79, 80,81, 82, 85, 87, 88,89, 94, 96, 97,101,105, 110, 111,

3	Cluster- III	130	112,113,116, 118, 125, 127, 128, 129, 131, 132, 133, 134, 135, 137, 138, 140,142,143, 144, 146, 147, 149, 151, 153, 154, 155, 156, 157, 158, 161, 162,163,165. 166, 168, 169, 170, 171, 173, 175, 177, 178, 180, 181, 182, 184,185,186, 188, 192, 193, 194, 196, 197, 198, 199, 201, 204, 205, 207, 208,214,219, 222, 226, 227, 231, 232, 235, 239, 242, 243, 244, 247, 248, 251,256,257, 259, 262, 264, 271, 272, 278, 281, 285, 290, 292, 299, 300, 301,312,327, 331, 332, 333, 337, 349, 354, 356, 358, 363, 364, 366, 369, 373,374,379, 382, 384, 390, 392, 395, 407, 409, 410, 411, 413, 417, 429, 431,432,433, 435, 437, 438, 439, 440, 441, 442, 443, 445, 448, 451, 452, 454,455, 456, 458, 461, 466, 468, 472, 476, 478, 481,485, 486, 487, 488, 489, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 504, 506, 508, 509, 511, 515, 519, 521, 522, 525, 529, 531, 537, 540, 541, 543, 545,548, 549, 551, 553, 554, 555, 556, 557, 558, 561, 563, 564, 565, 568, 570, 571) AG- (5, 8, 11, 35, 36, 45, 50, 51, 68, 71, 83, 86, 91, 95, 98, 108, 114, 115, 120,123, 130, 136, 139, 141, 145, 148, 150, 159, 160, 164, 172, 183, 200, 203,206, 209, 211, 212, 213, 216, 217, 225, 228, 229,236, 240, 241, 246, 249, 255,260, 267, 274, 275, 276, 277, 283, 286, 288, 289, 293, 313, 314, 320, 321,323, 324, 326, 328, 329, 330, 338, 342, 343, 346, 357, 359, 365, 368, 378,380, 385, 387, 389, 391, 393, 396, 402, 403, 405, 406, 408, 412, 415, 423,425, 428, 430, 436, 453, 457, 459, 462, 463, 465, 467, 470, 473, 475, 483,484, 490, 501, 505, 512, 513, 517, 520, 523, 527, 530, 532, 533, 534, 535,538, 539, 544, 550, 559 )
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Table 6 — Cluster composition of eighteen qualitative traits in 569 *asra* rice germplasm

Sl.No	Cluster Name	No. of germplasm out of 574 including 5 checks	Name of Genotypes
1.	Cluster-I	421	AG-(7,8,10,11,12,13,14,15,16,30,31,52,56,57,58,61,63,65,67,68, 69,70,72,73,74,75,76,78,80,106,107,109,110,111,112,113,114, 115,116, 117, 118, 119,122, 124, 125, 126, 127,128,129, 130, 131, 132, 133,134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147,148,149,150,152,153,154,155,158,159,160,162,163,164,165, 166,167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180,181,182,183,184,185,186,187,188,189,190,191,192,193,195, 196,197, 198, 199, 200, 201, 202, 203, 204, 205, 207, 231, 232, 233, 234,235, 237, 238, 239, 240, 241, 242, 245, 246, 247, 248, 249, 250, 251,252, 253, 255, 256, 257, 259, 261, 262, 263, 264, 265, 266, 267, 268,269, 270, 271, 272, 273, 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, 356, 357, 358, 359, 360, 361, 362, 363, 364,365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378,379, 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, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464,469, 470, 471, 472, 474, 475, 476, 477, 478, 479, 480, 481, 482, 484,485, 486, 487, 488, 489, 491, 492, 494,

			495, 496, 497, 498, 499, 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, 529, 530,531, 532, 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)
2.	Cluster-II	112	AG-(1,2,3,6,9,17,18,19,20,22,23,24,25,26,27,28,29,32,33, 37,38, 39, 40, 41,42, 43, 44, 45, 46,47, 48, 49, 50,51,53, 54, 55, 71, 81,82, 83, 84, 85,86, 87, 88, 89, 90,92, 93, 94, 95,96,97, 98, 99, 100, 101,102, 103, 105, 120, 121, 123, 206, 209, 210, 211, 212, 213, 214, 215,217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 228, 230, 331, 332,333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346,348,349,350, 351,353,354,355,467,490)
3.	Cluster- III	41	AG- ( 4,5,21,59,60,62,64,66,77,79,91,104,108, 151,156,157, 161,181, 194, 208, 216, 222, 229, 243, 244, 254, 258, 260, 274, 347, 352,380, 454, 473, 483, 493, 500, 528, 533, 534,535)

Table 7 — Comparing cluster composition of both quantitative and qualitative traits in 569 *asra* rice germplasm

Sl. No.	Cluster Name	No. of germplasm out of 574 including 5 checks	Name of Genotypes
1.	Cluster-I	139	AG-(7,10,30,65,67,70,72,73,106,107,109,117,119,122,124, 126, 152,167,174,176,179,187,189,190,191,195,202,233,234,237,238, 245,250,252,253,261,263,265,266,268,269,270,273,279,280,282, 284,287,291,294,295,296,297,298,302,303,304,305,306,307,308, 309,310,311,315,316,317,318,319,322,325,360,361,362,367,370, 371,372,375,376,377,381,383,386,388,394,397,398,399,400,401, 404,414,416,418,419,420,421,422,424,426,427,434,444,446,447, 449,450,460,464,471,474,477,479,480,482,502,503,507,510,514, 516,518,524,526,536,541,542,546,547,552,560,562,566,567,569, 572,573, 574)
2.	Cluster-II	33	AG-(1,6,17,20,27,28,40,42,44,46,47,49,53,54,55,81,82,85,87, 88,89,94,96,97,101,105,214,219,331,332,333,337,349)
3.	Cluster-III	12	AG-(5,91,108,229,260,274,380,473,483,533,534,535)