

Comment	Collection Site	Source	Species	Isolate	Accession/Name	Read type	Description	Sequencing metho	Assembly via	Annotation via	Assembly Length	GC%	AT%	
Concatenated	Mexico	Local	M.incognita	BZU6306	N/A	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	19231	16.52	83.48	
Not included	Mexico	Local	M.incognita	BZU6306	ERX10638972 to ERX10638980	Long read	Mitogenome	Oxford Nanopore	Aladin	GeSeq	17041	16.8	83.2	
	Mexico	Local	M.incognita	MV	N/A	Short read	Raw sequence	Novaseq	Novoplasty	GeSeq	17851	16.63	83.37	
	Russia	Local	M.incognita	KA	N/A	Short read	Raw sequence	Novaseq	Novoplasty	GeSeq	17756	16.59	83.41	
	Russia	Local	M.incognita	KV	N/A	Short read	Raw sequence	Novaseq	Novoplasty	GeSeq	17573	16.71	83.29	
Concatenated	California	NCBI	M.incognita	W1	SRR4242460	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	15974	16.41	83.59	
	California	NCBI	M.incognita	W1	SRR4242461	Short read	Raw sequence	HiSeq	Novoplasty					
Concatenated	California	NCBI	M.incognita	VW6	SRR4242463	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	18955	16.09	83.91	
	California	NCBI	M.incognita	VW6	SRR4242464	Short read	Raw sequence	HiSeq	Novoplasty					
Concatenated	California	NCBI	M.incognita	HarC	SRR4242465	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16775	16.57	83.43	
	California	NCBI	M.incognita	HarC	SRR4242466	Short read	Raw sequence	HiSeq	Novoplasty					
	Libya	NCBI	M.incognita	A14	SRR4242456	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16719	16.57	83.43	
	North Carolina	NCBI	M.incognita	557R	SRR4242467	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17808	16.59	83.41	
	Ivory coast	NCBI	M.incognita	L9	SRR4242469	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17090	16.49	83.51	
	USA	NCBI	M.incognita	L27	SRR4242470	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16802	16.59	83.41	
	French West Indies	NCBI	M.incognita	L19	SRR4242479	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16915	16.62	83.38	
	Japan	NCBI	M.incognita	Chb_Ash001	DRR213642	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16808	16.59	83.41	
	Japan	NCBI	M.incognita	Chb_Tgn001	DRR213643	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16909	16.55	83.45	
	Japan	NCBI	M.incognita	Chb_Ycmt001	DRR213644	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16941	16.62	83.38	
	Japan	NCBI	M.incognita	Fkok_Hkck001	DRR213645	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17721	16.67	83.33	
	Japan	NCBI	M.incognita	Hkd_Mr002	DRR213646	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17297	16.7	83.3	
	Japan	NCBI	M.incognita	Hkd_Mr003	DRR213647	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16532	16.51	83.49	
	Japan	NCBI	M.incognita	Ibrk_Tkb002	DRR213648	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16939	16.6	83.4	
	Japan	NCBI	M.incognita	Kch_Smmt001	DRR213649	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17461	16.61	83.39	
	Japan	NCBI	M.incognita	Kch_Ts001	DRR213650	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16771	16.56	83.44	
	Japan	NCBI	M.incognita	Kmmt_Gs001	DRR213651	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17036	16.57	83.43	
	Japan	NCBI	M.incognita	Kmmt_Gs003	DRR213652	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16432	16.48	83.52	
	Japan	NCBI	M.incognita	Kmmt_Gs004	DRR213653	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16941	16.6	83.4	
	Japan	NCBI	M.incognita	Kmmt_Gs005	DRR213654	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17006	16.64	83.36	
	Japan	NCBI	M.incognita	Kmmt_Gs006	DRR213655	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17143	16.67	83.33	
	Japan	NCBI	M.incognita	Kmmt_Gs008	DRR213656	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17106	16.67	83.33	
	Japan	NCBI	M.incognita	Kmmt_Gs009	DRR213657	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17005	16.65	83.35	
	Japan	NCBI	M.incognita	Kmmt_Gs010	DRR213658	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17391	16.59	83.41	
	Japan	NCBI	M.incognita	Kmmt_Msk001	DRR213659	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	15994	16.42	83.58	
	Japan	NCBI	M.incognita	Kmmt_Msk002	DRR213660	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17516	16.75	83.25	
	Japan	NCBI	M.incognita	Kmmt_Nshr001	DRR213661	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16749	16.45	83.55	
	Japan	NCBI	M.incognita	Kmmt_Ymg001	DRR213662	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17004	16.59	83.41	
	Japan	NCBI	M.incognita	Kmmt_Ymg002	DRR213663	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16940	16.62	83.38	
	Japan	NCBI	M.incognita	Mie_Ykic001	DRR213664	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17052	16.6	83.4	
	Japan	NCBI	M.incognita	Myzk_Hyg001	DRR213665	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17073	16.68	83.32	
	Japan	NCBI	M.incognita	Myzk_Myknj001	DRR213666	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17005	16.65	83.35	
	Japan	NCBI	M.incognita	Myzk_Tn001	DRR213667	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17151	16.64	83.36	
	Japan	NCBI	M.incognita	Oit_Tkd001	DRR213668	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17859	16.84	83.16	
	Japan	NCBI	M.incognita	Oknw_Isgk001	DRR213669	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17043	16.64	83.36	
	Japan	NCBI	M.incognita	Oknw_Isgk002	DRR213670	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17390	16.73	83.27	
	Japan	NCBI	M.incognita	Oknw_Ogm001	DRR213671	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	15407	16.23	83.77	
	Japan	NCBI	M.incognita	Oknw_Ynsr001	DRR213672	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17328	16.73	83.27	
	Japan	NCBI	M.incognita	Unkwn_Unkwn001	DRR213673	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16431	16.48	83.52	
	Japan	NCBI	M.incognita	Ymgt_Unkwn001	DRR213674	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17207	16.67	83.33	
	Japan	NCBI	M.incognita	Ymgt_Unkwn002	DRR213675	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17375	16.55	83.45	
	Japan	NCBI	M.incognita	Hkd_Mr001	DRR213676	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16838	16.57	83.43	
	Japan	NCBI	M.incognita	Kmmt_Gs002	DRR213677	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	658			
	Japan	NCBI	M.incognita	Kmmt_Gs007	DRR213678	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16838	16.57	83.43	
	Japan	NCBI	M.incognita	Kmmt_Ots001	DRR213679	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	15811	16.29	83.71	
	Japan	NCBI	M.incognita	Mie_Mtzk001	DRR213680	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16663	16.45	83.55	
	Japan	NCBI	M.incognita	Ngt_Kjkw001	DRR213681	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16200	16.45	83.55	
	Japan	NCBI	M.incognita	Ibrk_Chks001	DRR213682	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16750	16.44	83.56	
	Japan	NCBI	M.incognita	Kgsm_Ky001	DRR213683	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16971	16.61	83.39	
	Japan	NCBI	M.incognita	Kgsm_Ngsm001	DRR213684	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16940	16.64	83.36	
	Japan	NCBI	M.incognita	Kgsm_Nktn001	DRR213685	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	907			
	Japan	NCBI	M.incognita	Kmmt_Shr001	DRR213686	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16600	16.53	83.47	
	Japan	NCBI	M.incognita	Ngsk_Ssb001	DRR213687	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	17043	16.64	83.36	
	Japan	NCBI	M.incognita	Shzok_Shmz001	DRR213688	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	15618	16.37	83.63	
	Japan	NCBI	M.incognita	Ymns_Malps001	DRR213690	Short read	Raw sequence	HiSeq/NextSeq	Novoplasty	GeSeq	16430	16.48	83.52	
Concatenated	Brazil	Local	M.incognita	R1-2_S1	SRR7504310	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	20644	16.3	83.7	
	Brazil	Local	M.incognita	R1-2_S1	SRR7504311									
Concatenated	Brazil	Local	M.incognita	R1-3_S2	SRR7504312	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	20704	16.33	83.67	
	Brazil	Local	M.incognita	R1-3_S2	SRR7504313									
Concatenated	Brazil	Local	M.incognita	R1-6_S3	SRR7504314	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16822	16.49	83.51	
	Brazil	Local	M.incognita	R1-6_S3	SRR7504315									
Concatenated	Brazil	Local	M.incognita	R2-1_S4	SRR7504316	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	17160	16.55	83.45	
	Brazil	Local	M.incognita	R2-1_S4	SRR7504317									
Concatenated	Brazil	Local	M.incognita	R2-6_S6	SRR7504318	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	18584	16.33	83.67	
	Brazil	Local	M.incognita	R2-6_S6	SRR7504319									
Concatenated	Brazil	Local	M.incognita	R3-1_S7	SRR7504320	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	17233	16.59	83.41	
	Brazil	Local	M.incognita	R3-1_S7	SRR7504321									
Concatenated	Brazil	Local	M.incognita	R3-2_S8	SRR7504322	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16146	16.31	83.69	
	Brazil	Local	M.incognita	R3-2_S8	SRR7504323									
Concatenated	Brazil	Local	M.incognita	R3-4_S9	SRR7504324	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	20136	16.21	83.79	
	Brazil	Local	M.incognita	R3-4_S9	SRR7504325									
Concatenated	Brazil	Local	M.incognita	R4-1_S10	SRR7504326	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	17271	16.62	83.38	
	Brazil	Local	M.incognita	R4-1_S10	SRR7504327									
Concatenated	Brazil	Local	M.incognita	R4-3_S11	SRR7504328	Short read	Raw sequence	NextSeq	Novoplasty	GeSeq	16531	16.5	83.5	
	Brazil	Local	M.incognita	R4-3_S11	SRR7504329									
Concatenated	Brazil	Local	M.incognita	R4-4_S12	SRR7504330	Short read	Raw sequence							

	French West Indies	NCBI	M.arenaria	L32	SRR4242480	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17366	16.68	83.32
RefSeq		NCBI	M.arenaria		NC026554		Mitogenome		Primer walking	Pre_annotated	17.580		
used to polish		Local	M.javanica	BZU6303	ERR11210402	Short read	Raw sequence	HiSeq					
Polished		Local	M.javanica	BZU6303	ERR10638963 to ERX10638988	Long read	Mitogenome	Oxford Nanopore	Aladin	GeSeq	21449	16.59	83.41
Concatenated	California	NCBI	M.javanica	VW4	SRR4242459	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17663	16.54	83.46
	California	NCBI	M.javanica	VW4	SRR4242458	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq			
	California	NCBI	M.javanica	VW5	SRR4242462	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17450	16.63	83.37
	Morocco	NCBI	M.javanica	L57	SRR4242482	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16250	16.42	83.58
	Thailand	NCBI	M.javanica	LD15	SRR4242478	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16349	16.3	83.7
	Burkina Faso	NCBI	M.javanica	LD17	SRR4242471	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16148	16.41	83.59
used to polish	Longyan	NCBI	M.javanica	Longyan	SRR17088603	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	22028		
Polished	Longyan	NCBI	M.javanica	Longyan	SRR17088606	Long read	Raw sequence	PACBIO SMRT	Aladin	GeSeq	21335	17.05	82.95
RefSeq		NCBI	M.javanica		NC026556				Primer walking	Pre_annotated	18.291		
Concatenated	USA: Florida	NCBI	M.floridensis	Isolate 5	ERR104974	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16684	16.49	83.51
	USA:Florida	NCBI	M.floridensis	SJF1	SRR4242475	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	16191	16.3	83.64
Concatenated	USA:Florida	NCBI	M.floridensis	SJF1	SRR4242474	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq			
		NCBI	M.enterolobii	L30	SRR4242473	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	22017	16.92	83.08
	Burkina Faso	NCBI	M.enterolobii	L30	SRR4242472	Short read	Raw sequence	HiSeq	Novoplasty				
	Puerto Rico	Local	M.enterolobii	E1834	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	19193	17.18	82.82
	Senegal	Local	M.enterolobii	10108	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	19029	16.84	83.16
	Togo	Local	M.enterolobii	c6703	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	18316	16.82	83.18
	China	Local	M.enterolobii	e1470	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	17980	16.85	83.15
	Singapore	Local	M.enterolobii	e8336	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	18727	16.87	83.13
	Florida	Local	M.enterolobii	n01	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	18663	16.79	83.21
	USA	Local	M.enterolobii	n02	N/A	Long read	Mitogenome	HIFI	Aladin	GeSeq	19067	16.88	83.12
RefSeq		NCBI	M.enterolobii		NC026555		Mitogenome		Primer walking	Pre_annotated	17053		
		Local	M.hapla	m64069	N/A	Long read	Raw sequence	HIFI	MitoS2	MitoS2	17558	18.31	81.69
		Local	M.ethiopica	V9	N/A	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	17021	16.53	83.47
		Local	M.ethiopica	V14	N/A	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	15377	16.59	83.41
	Slovenia	Local	M.luci	V13	ERX3689825 to ERX3689830	Short read	Raw sequence	HiSeq	Novoplasty	GeSeq	22003	16.42	83.58
Not included	Slovenia	Local	M.luci	V13	ERX3670349 to ERX3670353	Long read	Mitogenome	PACBIO	Pre_assembled	GeSeq	18064		
		Local	M.luci	V05	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	16645	16.47	83.53
		Local	M.luci	V06	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	15563	16.26	83.74
		Local	M.luci	V11	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	17352	16.59	83.41
		Local	M.luci	V12	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	17147	16.59	83.41
		Local	M.momata	V07	N/A	Short read	Mitogenome	HiSeq	Novoplasty	GeSeq	17425	16.56	83.44
Not included		Local	M.chitwoodi	Mc1	N/A	Long read	Mitogenome		Aladin	GeSeq	21212	14.67	85.33
		NCBI	M.chitwoodi	Mchitwoodi NCSU 20	ERR1212566	Short read	Raw sequence	MISeq	Novoplasty	GeSeq	20424	15.21	84.79
RefSeq*	Tulelake	NCBI	M.chitwoodi	CAMC2	NC024096		Mitogenome		Primer walking	Pre_annotated	18.201		
	Costa rica	NCBI	M.exiqua	Mex1	MZ359281		Mitogenome		Obitools+velvet	Pre_annotated	20974		
Not included		Local	M.oryzae		N/A	Long read	Mitogenome		Aladin		19466	16.7	83.3
RefSeq*		NCBI	M.oryzae	N/A	NC041493		Mitogenome		Obitools+velvet	Pre_annotated	17066		
Polished		Local	M.graminicola		N/A	Long read	Mitogenome		Aladin	GeSeq	19588	16.49	83.51
RefSeq	Hainan	NCBI	M.graminicola		NC056772		Mitogenome		Primer walking	Pre_annotated	19589		
	U.S.A	NCBI	P.vulnus		GQ332425		Mitogenome		Primer walking	Pre_annotated	21656		